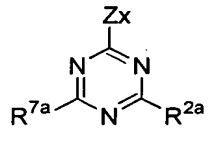
CLAIMS

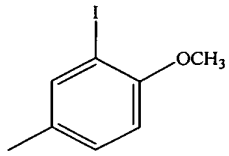
We claim:

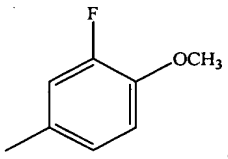
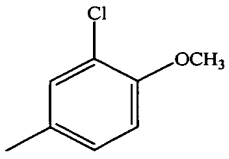
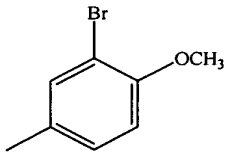
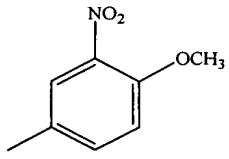
1. A compound of the formula Ia:

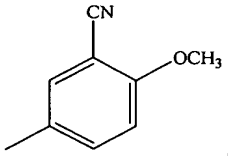
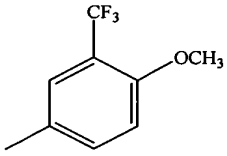
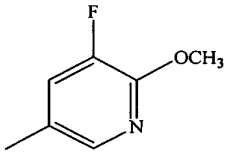
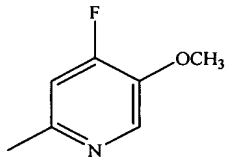


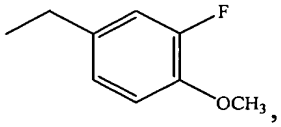
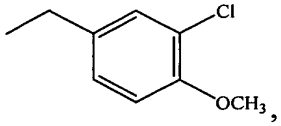
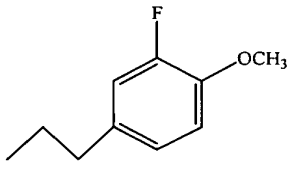
(Ia)

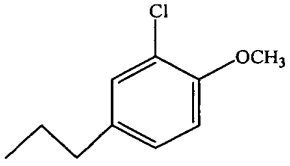
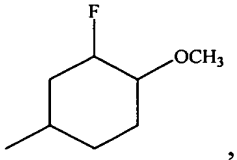
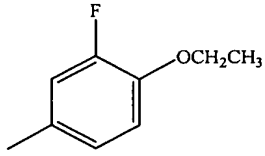
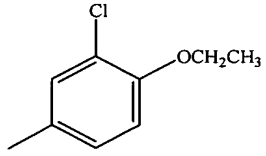
, or salt thereof;

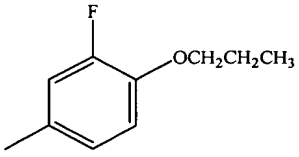
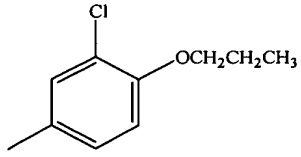
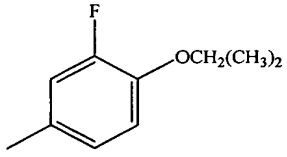
wherein Zx is -O-R^{1a}, and R^{1a} is selected from  ,

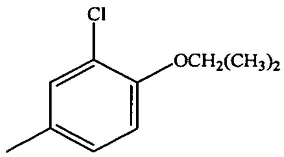
 ,  ,  ,  ,

 ,  ,  ,  ,

 ,  ,  ,

 ,  ,  ,  ,

 ,  ,  ,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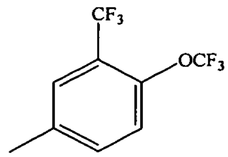
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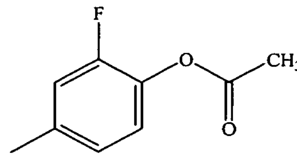
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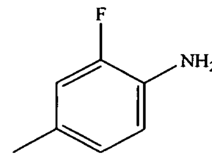
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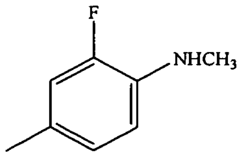
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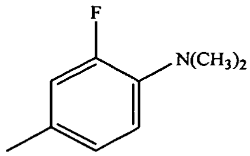
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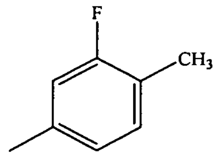
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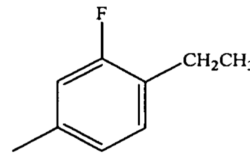
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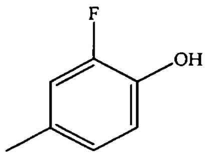
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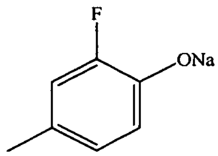
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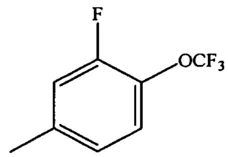
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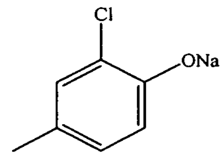
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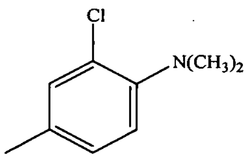
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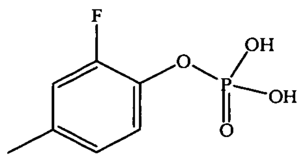
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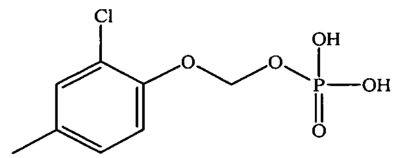
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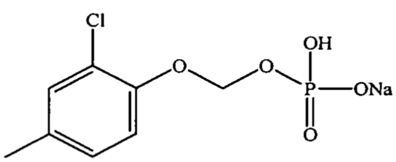
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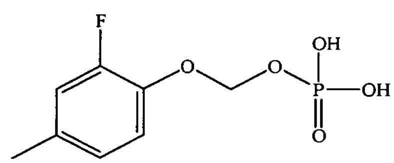
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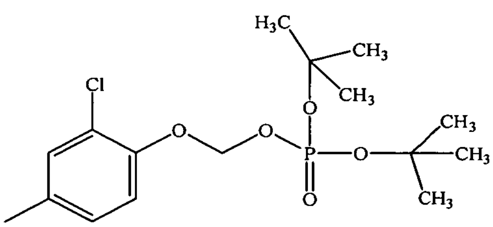
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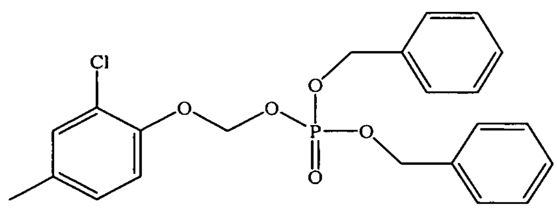
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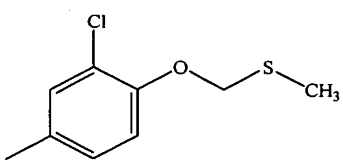
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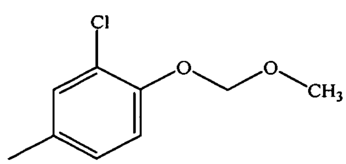
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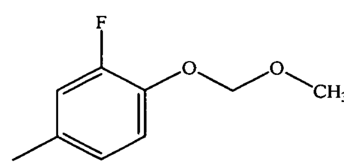
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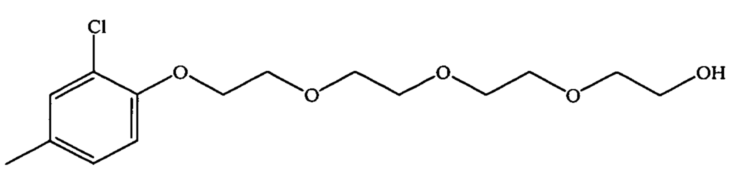
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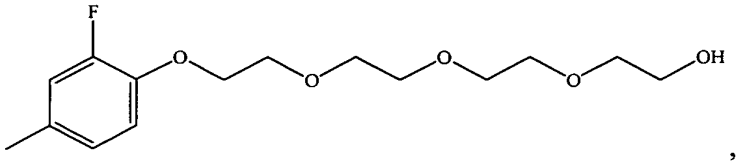
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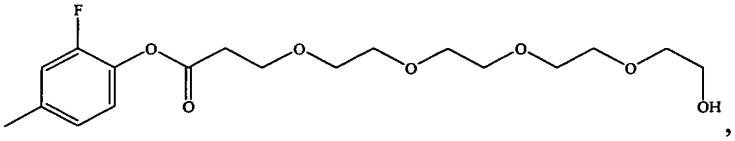
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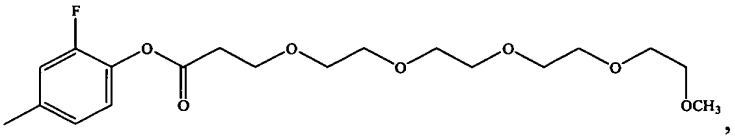
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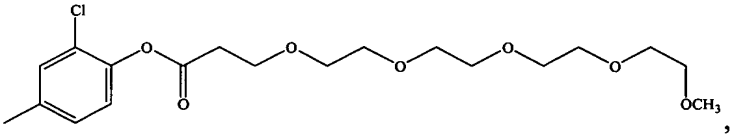
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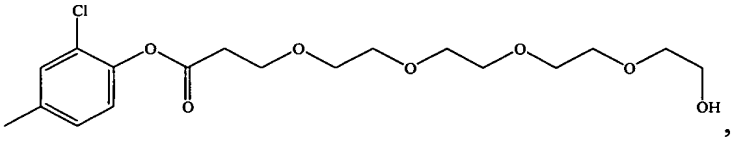
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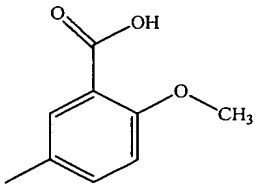
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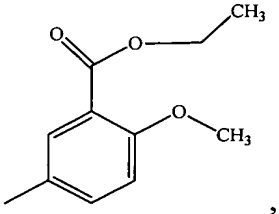
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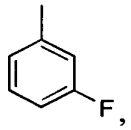
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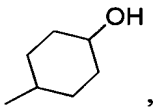
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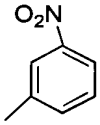
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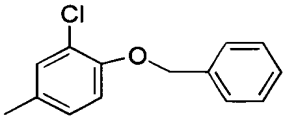
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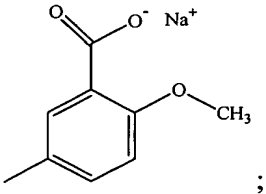
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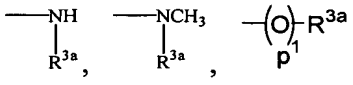
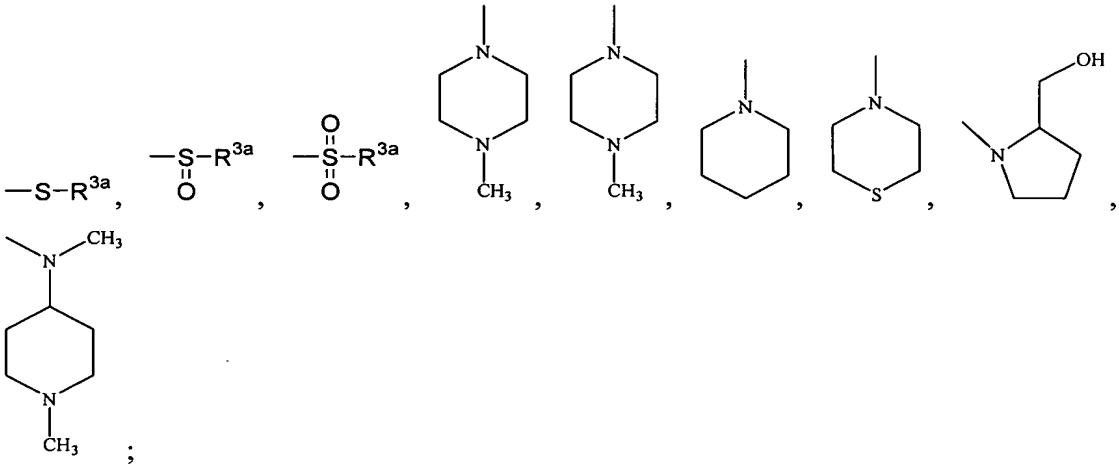
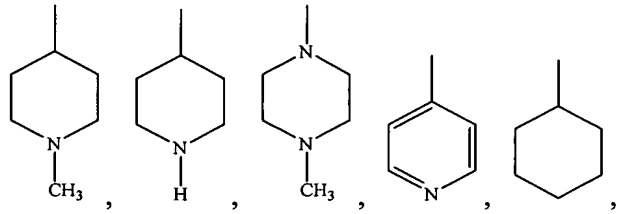
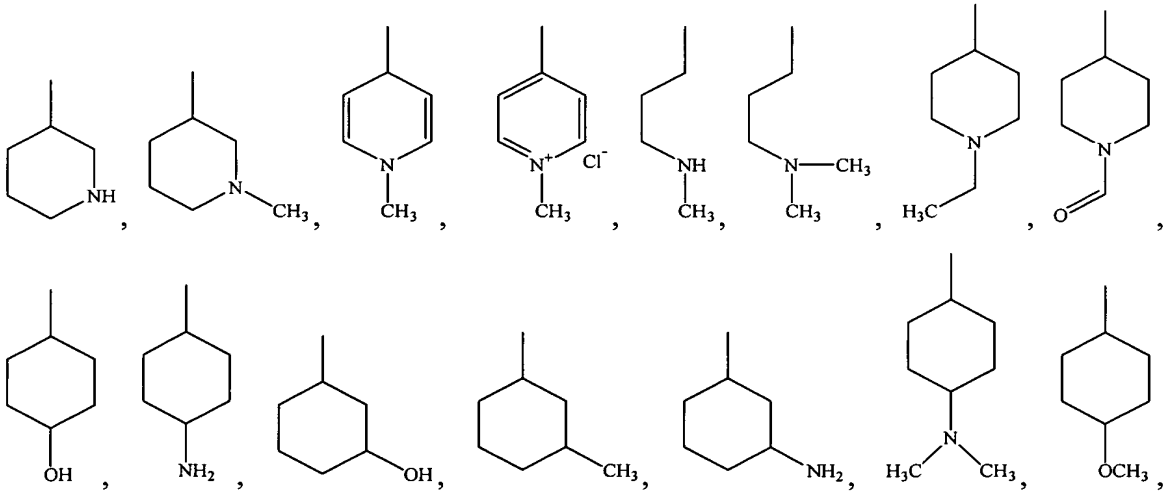
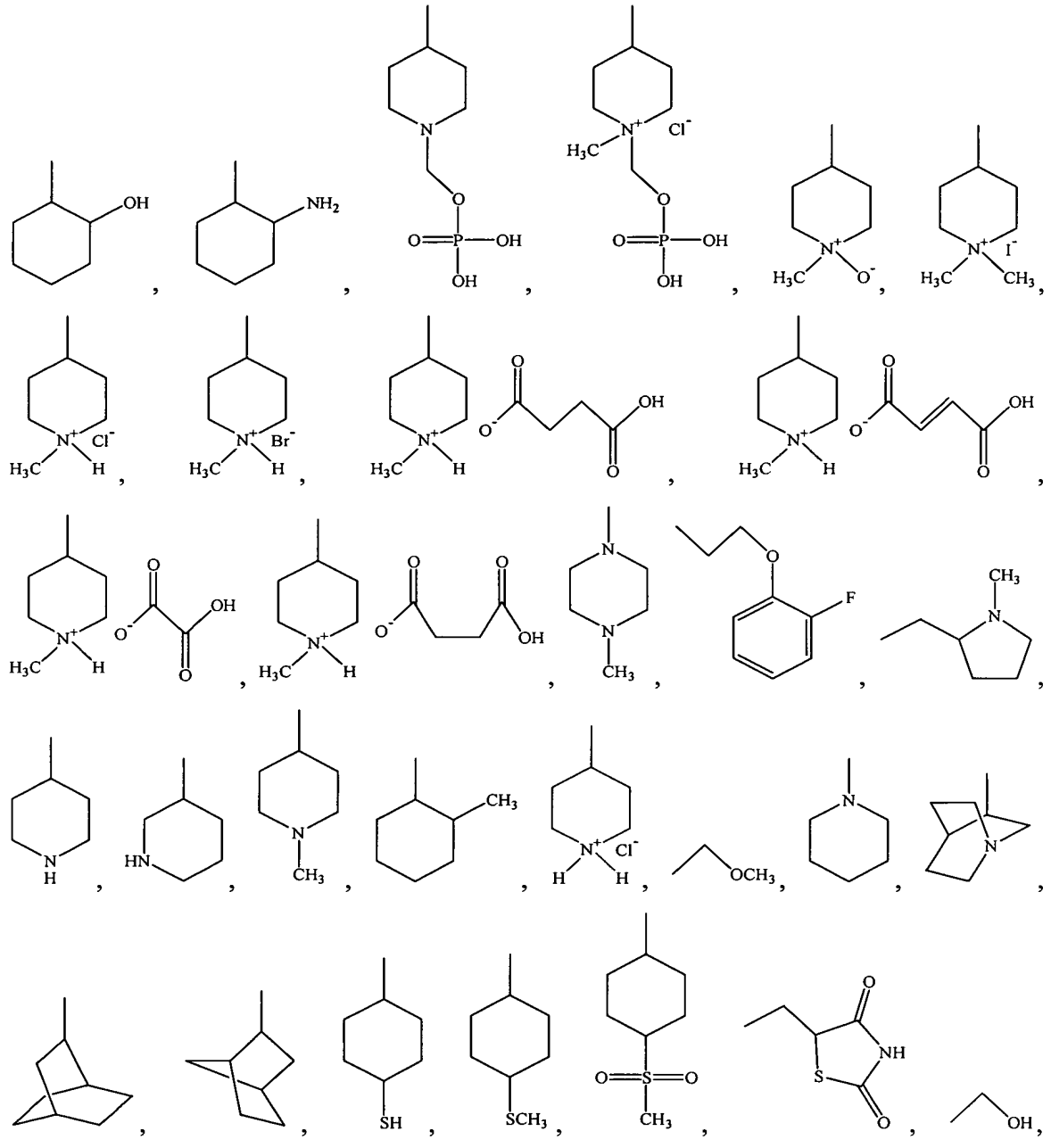
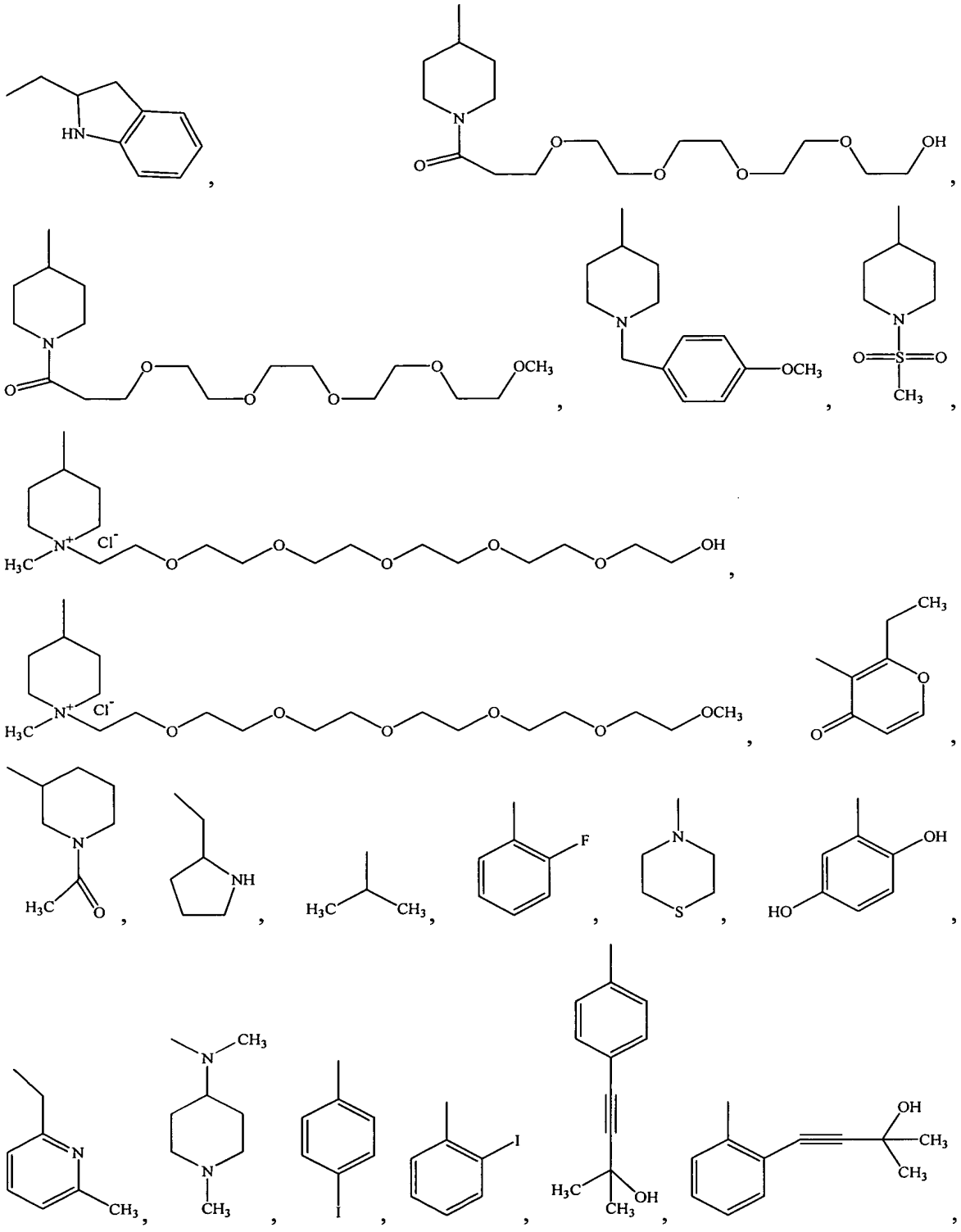
wherein R^{2a} is selected from  , wherein p^1 is 0 or 1,

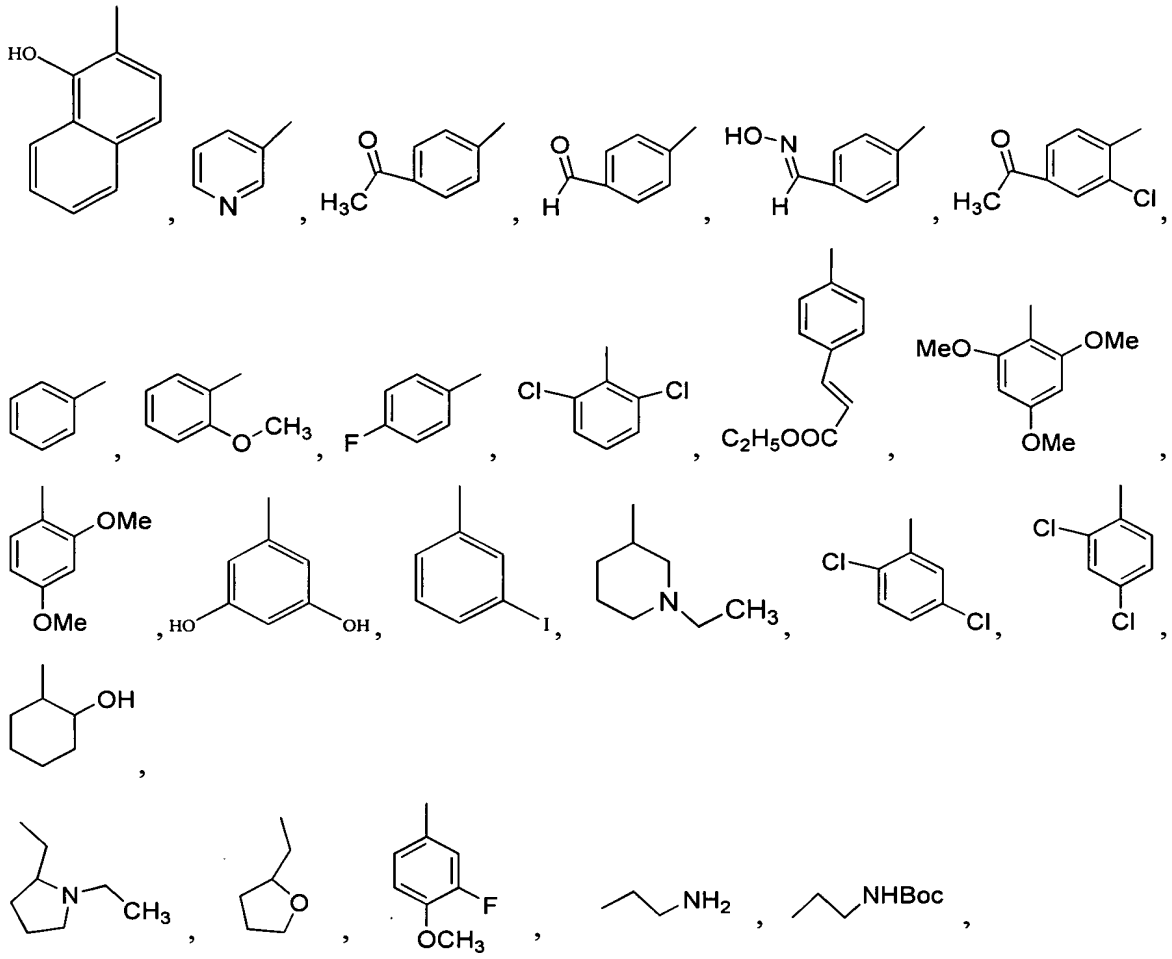


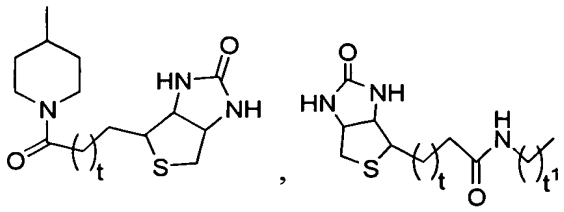
wherein R^{3a} is selected from –H,  ,







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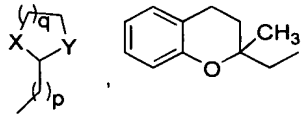
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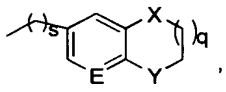
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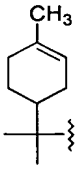
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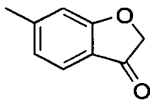
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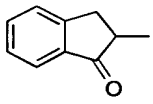
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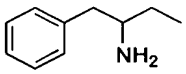
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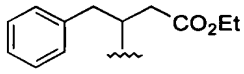
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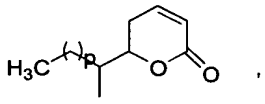
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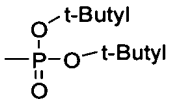
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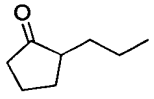
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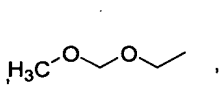
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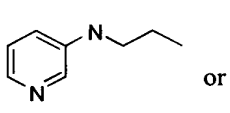
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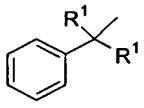
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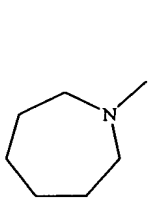
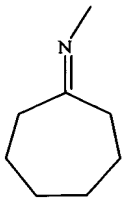
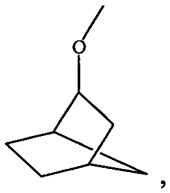
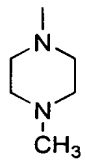
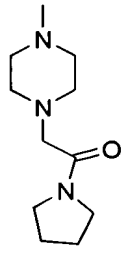
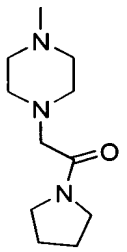
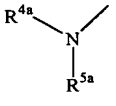
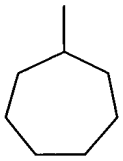
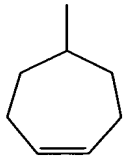
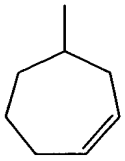
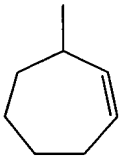
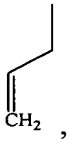
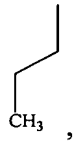
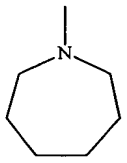
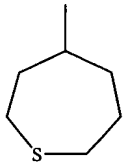
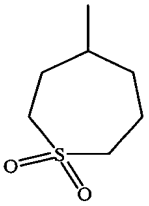
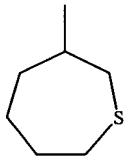
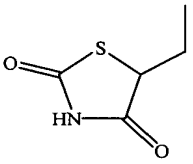
wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive;

wherein R^{7a} is selected from  ,  ,  ,  ,  ,  .HCl  , or ;

wherein R^{4a} is selected from –H or $-CH_3$; and

wherein R^{5a} is selected from  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  , or  .

2. A composition comprising a compound of the formula Ia, as claimed in Claim 1.

3. The composition as claimed in Claim 2, further comprising:
a pharmaceutically acceptable carrier;
optionally, a pharmaceutically acceptable auxiliary;
optionally, a pharmaceutically acceptable preservative; and
optionally, a pharmaceutically acceptable excipient.

4. The composition as claimed in Claim 2, further comprising an agent selected from a chemotherapeutic agent, an immunosuppressive agent, a cytokine, a cytotoxic agent, a nucleolytic compound, a radioactive isotope, a receptor, a pro-drug activating enzyme, an anti-inflammatory agent, an antirheumatic agent, a cardiovascular agent, a toxin, or any combination thereof.

5. The composition as claimed in Claim 2, wherein the composition is in the form of a tablet, a capsule, a cachet, a powder, a granule, a solution, a suspension, an emulsion, a bolus, a lozenge, a suppository, a pessary, a tampon, a cream, a gel, a paste, a foam, a spray, an aerosol, a microcapsule, a liposome, a transdermal patch, a pastille, a paste, or a mouthwash.

6. A medical device comprising:

a drug delivering or eluting member; and

a composition in accordance with Claim 2 disposed on or within the drug delivering or eluting member.

7. The medical device as claimed in Claim 6, wherein the drug delivering or eluting member is a stent.

8. The medical device as claimed in Claim 6, wherein the drug delivering or eluting member is selected from a shunt, a colostomy bag attachment device, an ear drainage tube, a lead for a pacemaker, a lead for an implantable defibrillator, a suture, a staple, an anastornosis device, a vertebral disk, a bone pin, a suture anchor, a hemostatic barrier, a clamp, a screw, a plate, a clip, a vascular implant, a tissue adhesive, a tissue sealant, a tissue scaffold, a bone substitute, an intraluminal device, a stent, or a vascular support.

9. A microarray comprising:

a gene expression profile generated from a cell type treated with a compound of the formula Ia, as claimed in Claim 1.

10. The microarray as claimed in Claim 9, wherein the cell type is selected from the group of cells comprising coronary artery endothelium, umbilical artery endothelium, umbilical vein endothelium, aortic endothelium, dermal microvascular endothelium, pulmonary artery endothelium, myometrium microvascular endothelium, keratinocyte epithelium, bronchial epithelium, mammary epithelium, prostate epithelium, renal cortical epithelium, renal proximal tubule epithelium, small airway epithelium, renal epithelium, umbilical artery smooth muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle, dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes, aortic smooth muscle, mesangial cells, coronary artery smooth muscle, bronchial smooth muscle, uterine smooth muscle, lung fibroblast, osteoblasts, or prostate stromal cells.

11. An expression profile database comprising:

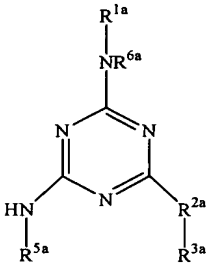
a patient identifying reference; and

an expression profile for the patient generated by administering to the patient a compound of the formula Ia, as claimed in Claim 1.

12. A method of treating unwanted cellular proliferation, treating an inflammation mediated disease, treating a hyperproliferative disease, or modulating a glycosidase enzyme in a human or an animal comprising administering to the human or animal a therapeutically effective amount of a composition comprising a compound of the formula Ia, as claimed in Claim 1.

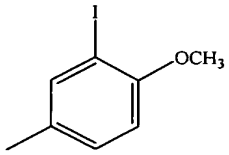
13. The method as claimed in Claim 12, wherein the compound is present in the composition in an amount effective upon administration in a daily dose, a daily sub-dose, or any appropriate fraction thereof to the human or animal to reduce the effects of the disease, to reduce the effects of the unwanted cellular proliferation, to reduce the effects of the inflammation mediated disease, to reduce the effects of the hyperproliferative disease, or to modulate the glycosidase enzyme.

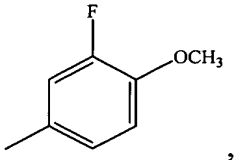
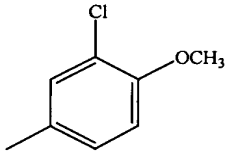
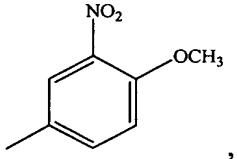
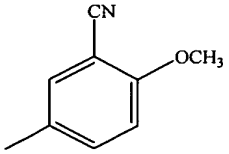
14. A compound of the formula XXIIIa:

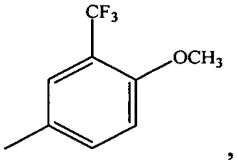
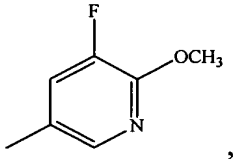
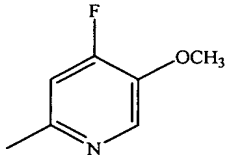
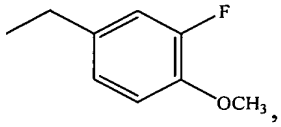


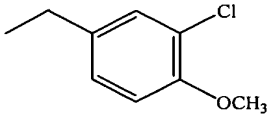
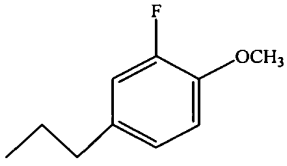
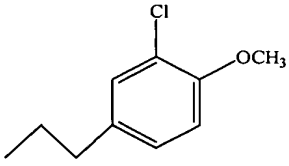
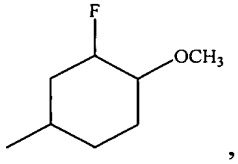
(XXIIIa)

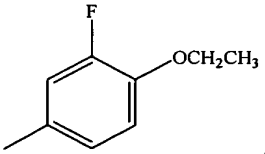
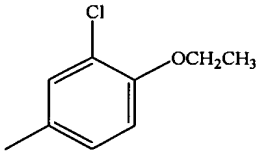
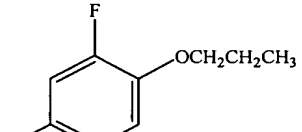
, or a salt thereof,

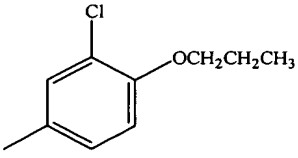
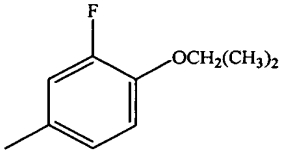
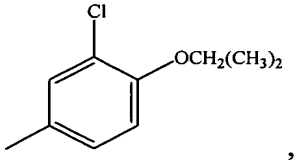
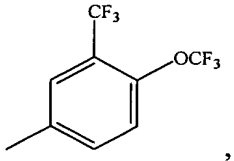
wherein R^{1a} is selected from  ,

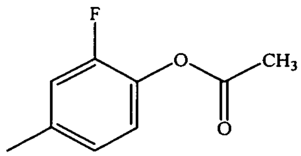
 ,  ,  ,  ,

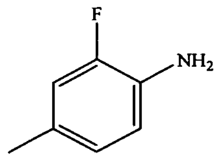
 ,  ,  ,  ,

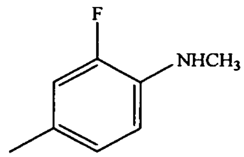
 ,  ,  ,  ,

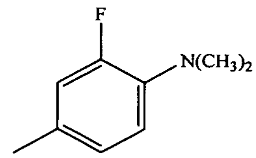
 ,  ,  ,

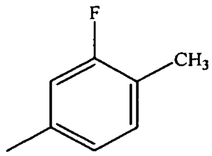
 ,  ,  ,  ,

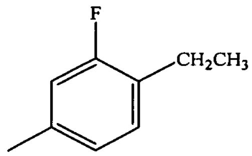
 ,

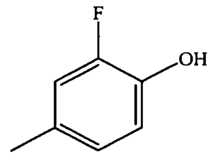
 ,

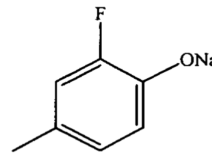
 ,

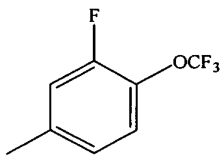
 ,

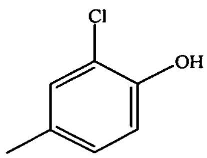
 ,

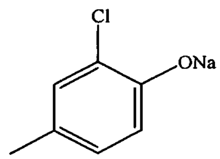
 ,

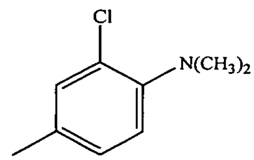
 ,

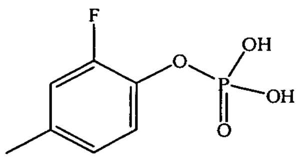
 ,

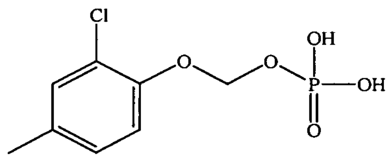
 ,

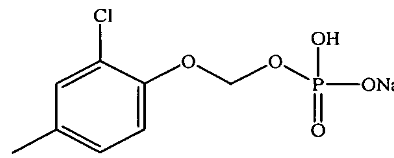
 ,

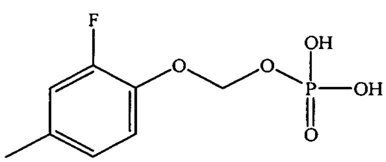
 ,

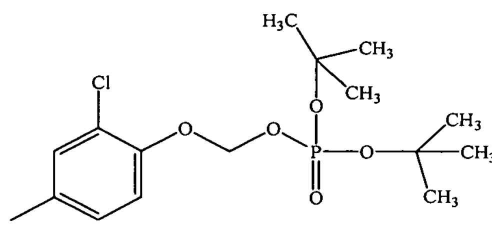
 ,

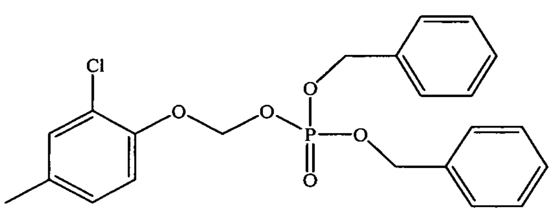
 ,

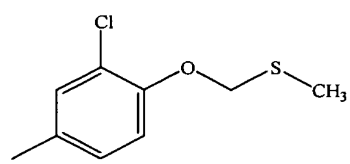
 ,

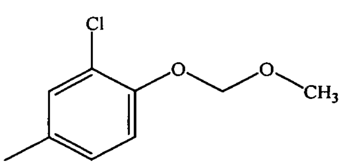
 ,

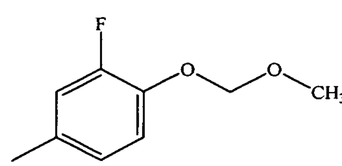
 ,

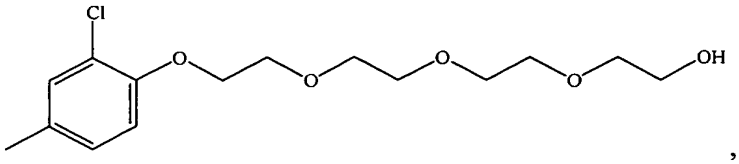
 ,

 ,

 ,

 ,

 ,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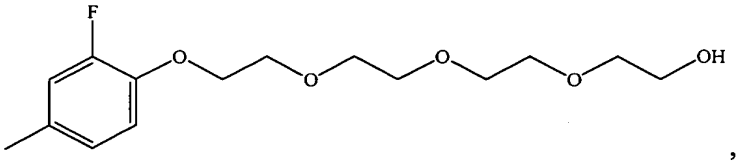
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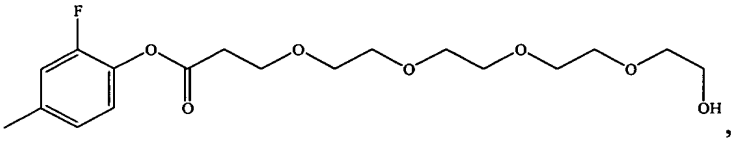
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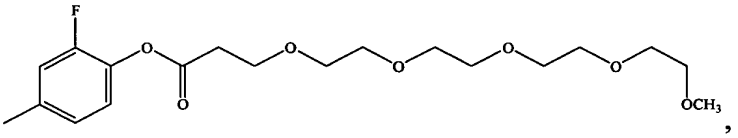
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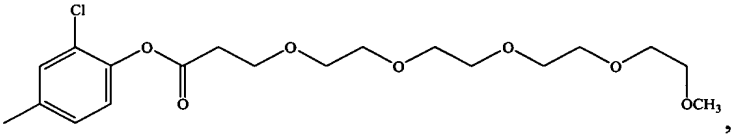
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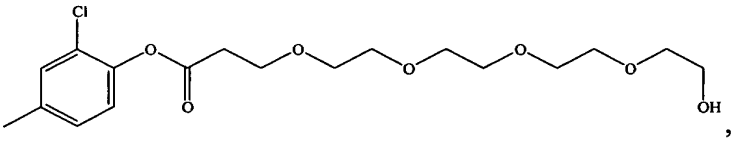
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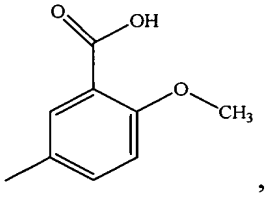
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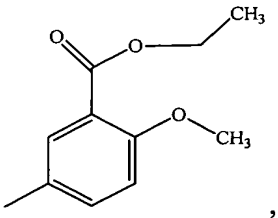
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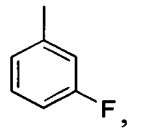
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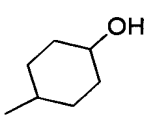
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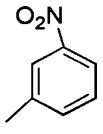
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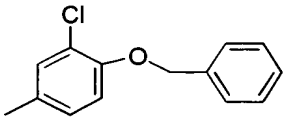
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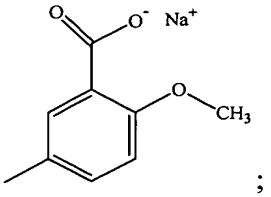
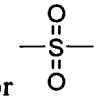
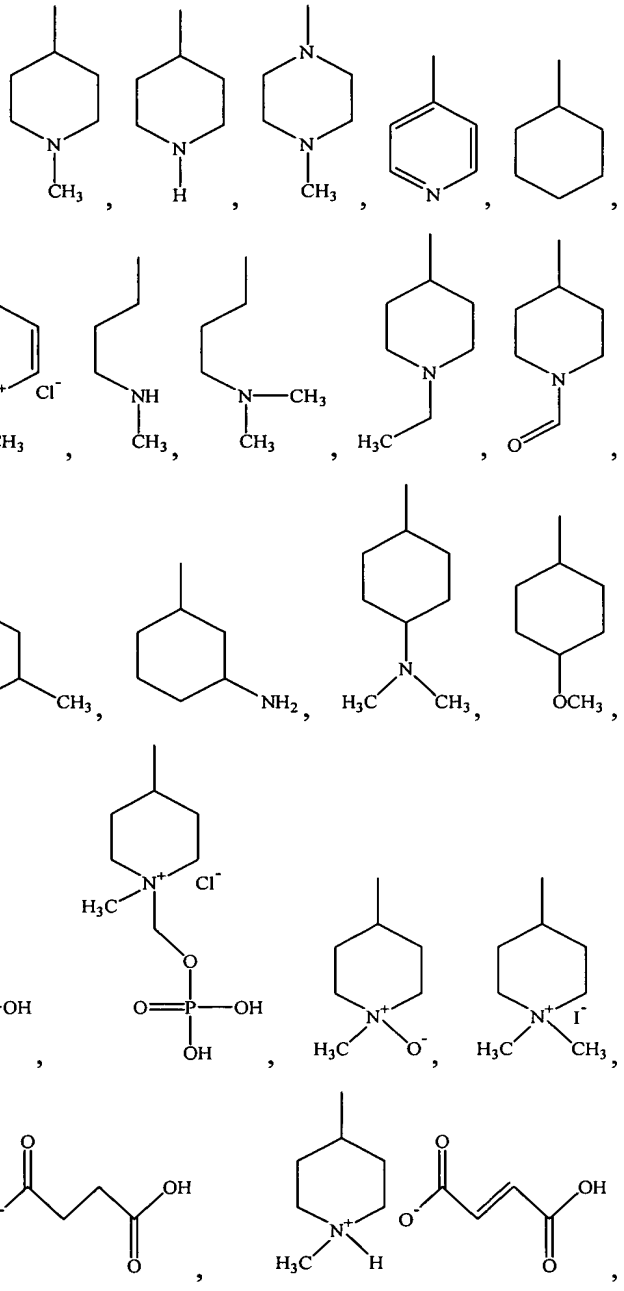
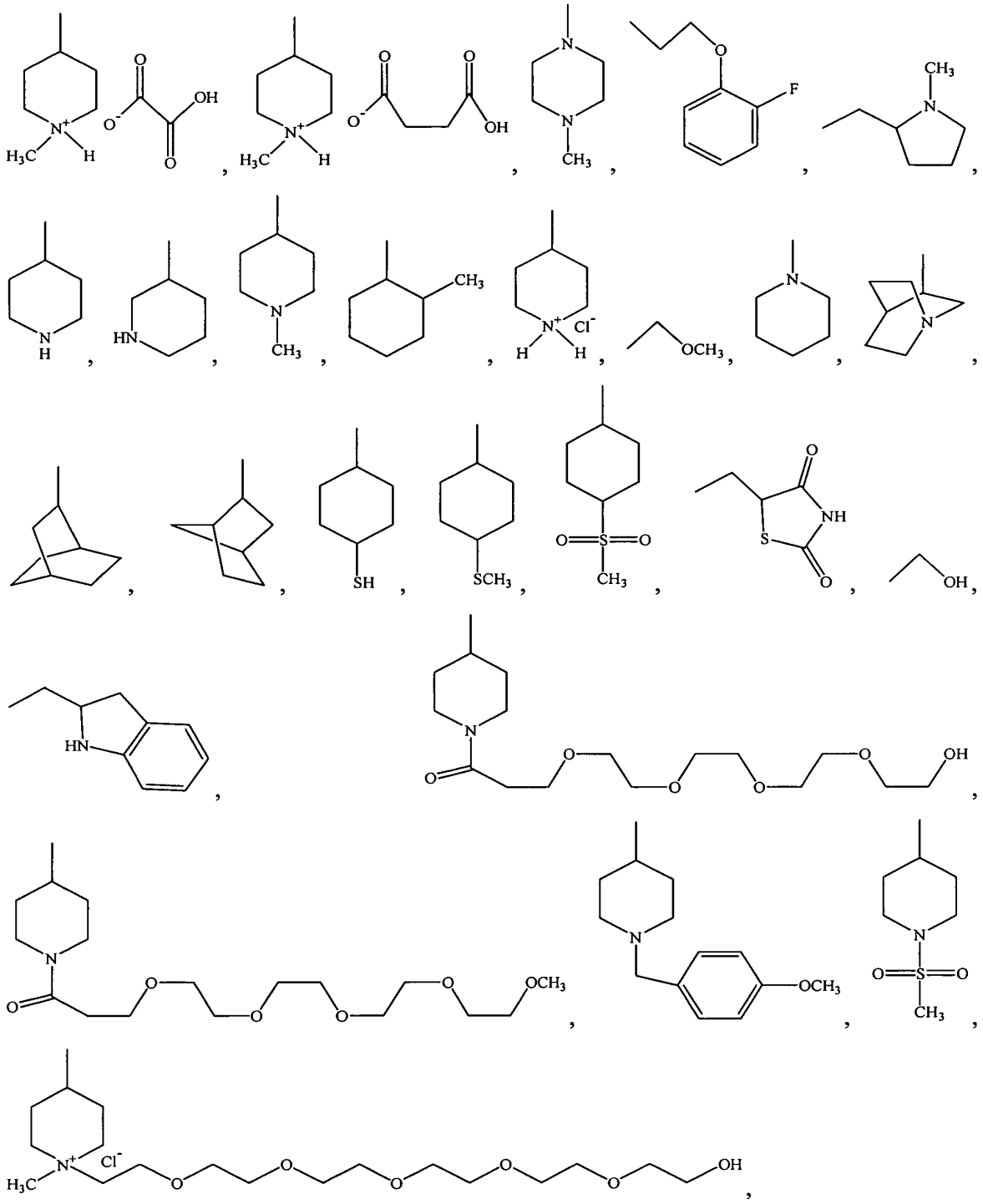
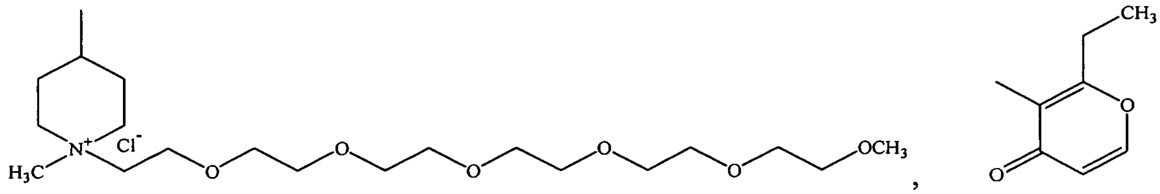
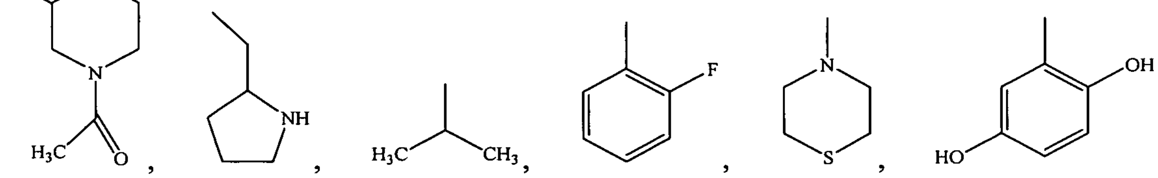

;

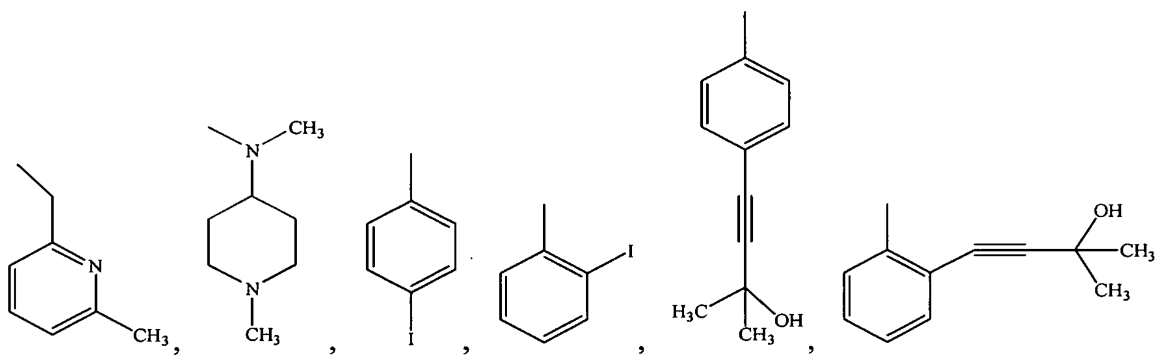
wherein R^{2a} is selected from  wherein P^1 is 0, —S—,  , or  ;

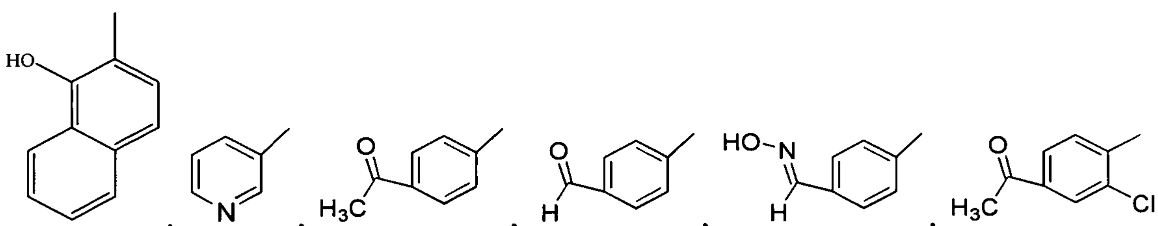
wherein R^{3a} is selected from –H, 

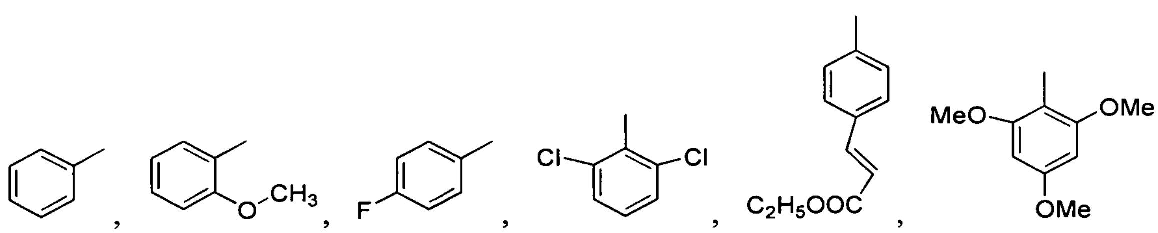


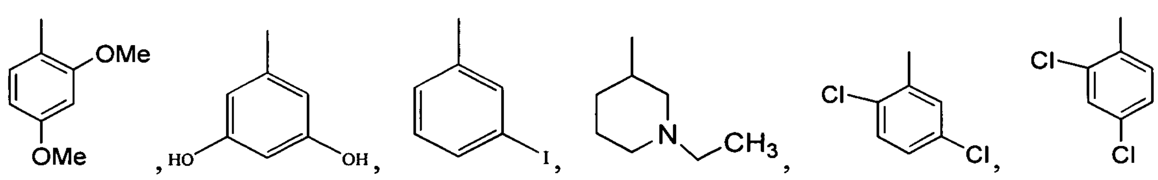

Cl⁻
H3C
N+
O
OCH3
CH3
O
O

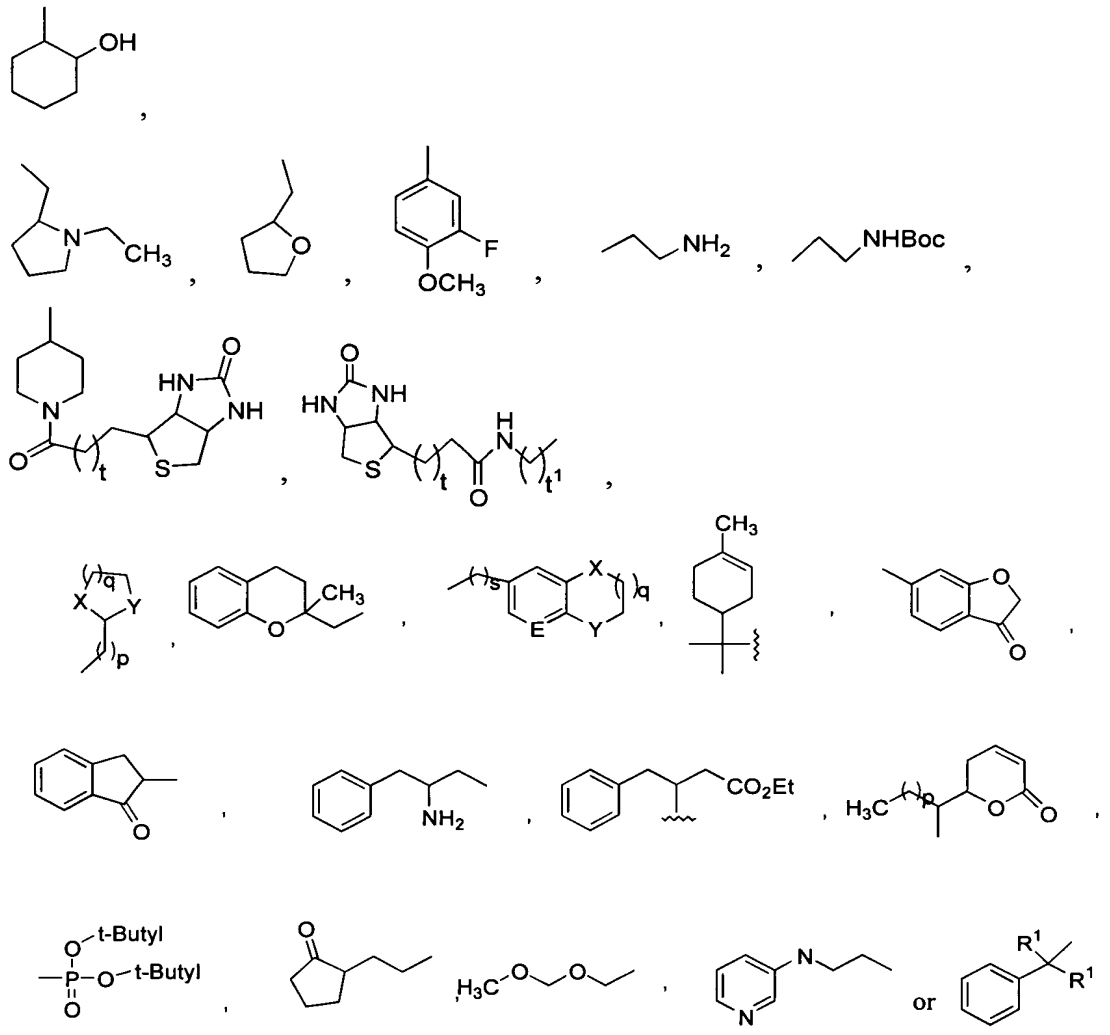

N
H3C
O
NH
H3C
CH3
F
N
S
OH
HO


N
CH3
CH3
N
N
CH3
I
I
H3C
CH3
OH
OH
CH3
CH3

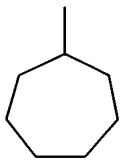
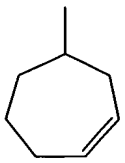
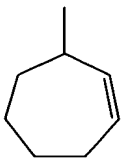
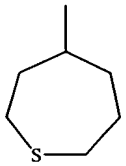
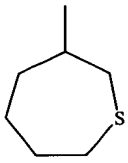
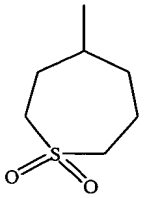
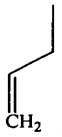
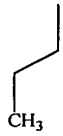
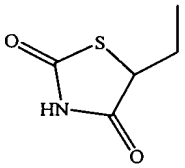

HO
N
O
H3C
O
H
HO-N
H
O
H3C
Cl


O
CH3
F
Cl
Cl
C2H5OOC
MeO
OMe
OMe


OMe
OMe
HO
OH
I
N
CH3
Cl
Cl
Cl
Cl

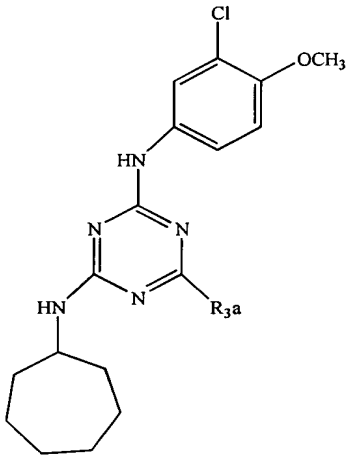


wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive;

wherein R^{5a} is selected from  ,  ,  ,  ,  ,  ,  ,  ,  , or  ; and

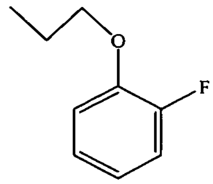
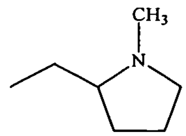
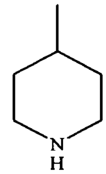
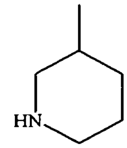
wherein R^{6a} is selected from –H or –CH_3.

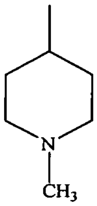
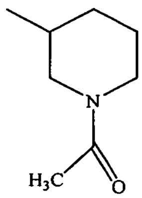
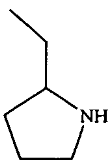
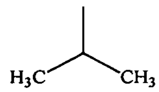
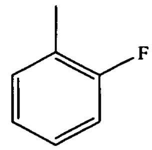
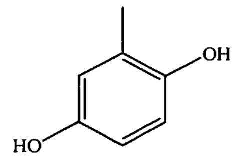
15. A compound as claimed in Claim 14 of the formula $XXIVa^{11}$:

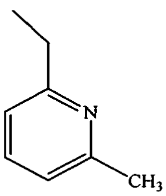
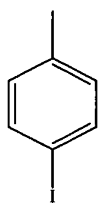
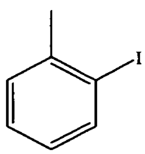
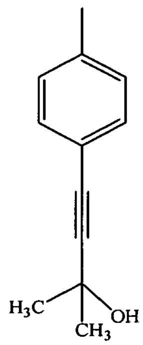
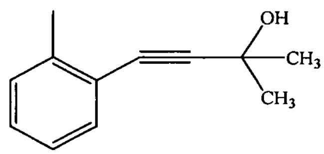
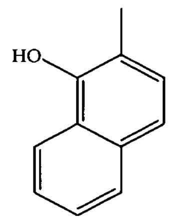


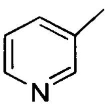
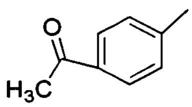
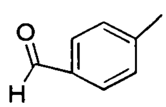
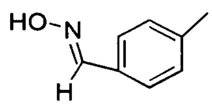
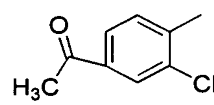
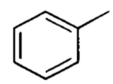
($XXIVa^{11}$)

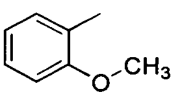
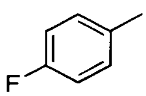
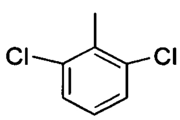
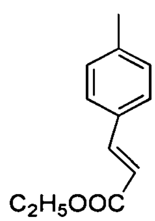
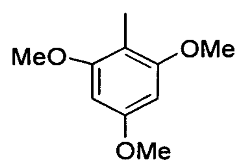
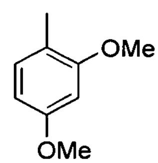
, or a salt thereof,

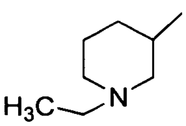
wherein R^{3a} is selected from,  ,  ,  ,  ,

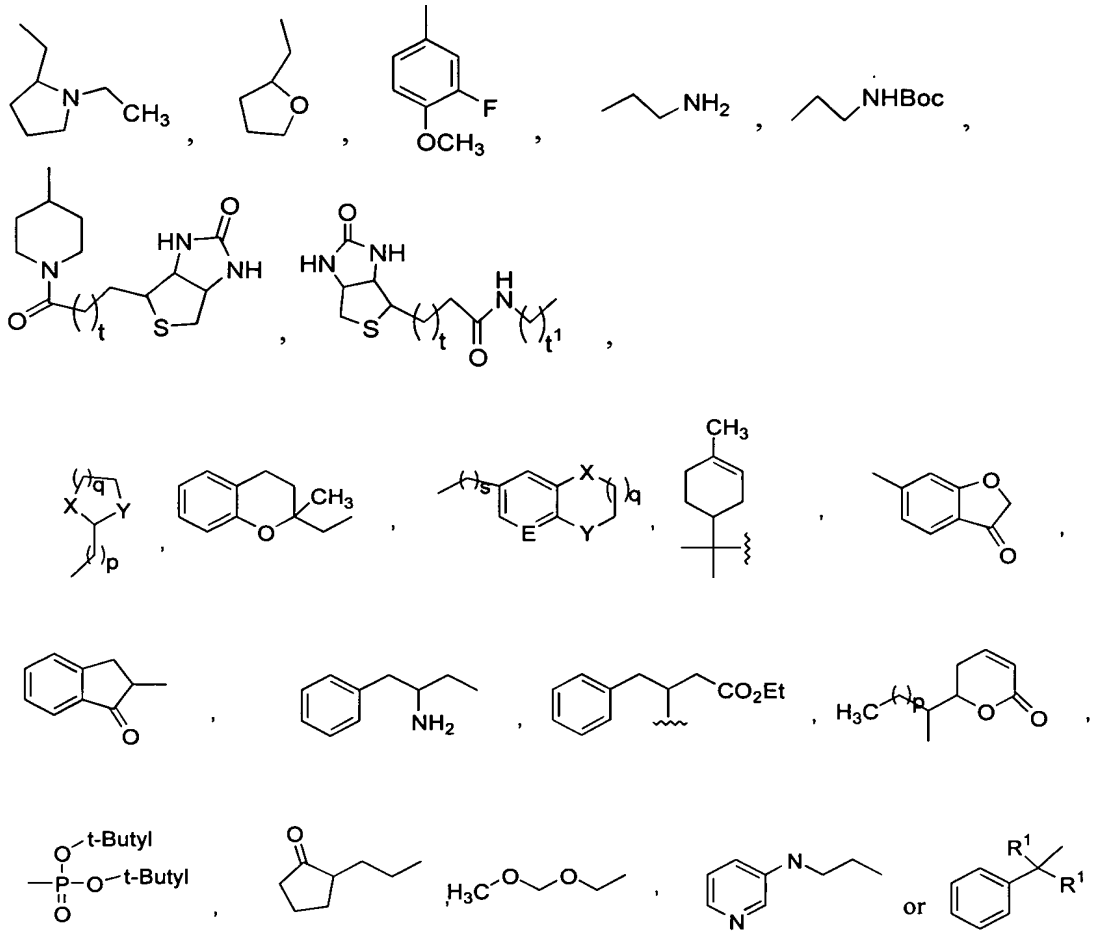
 ,  ,  ,  ,  ,  ,

 ,  ,  ,  ,  ,  ,

 ,  ,  ,  ,  ,  ,

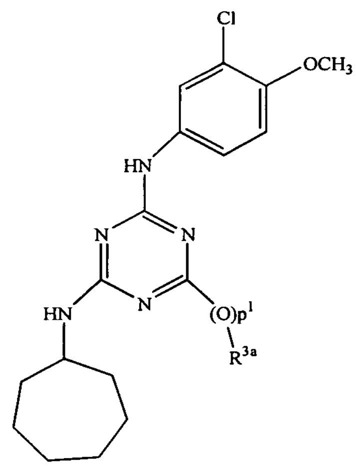
 ,  ,  ,  ,  ,  ,

 ,



wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive.

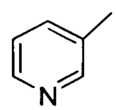
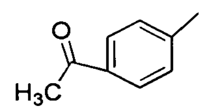
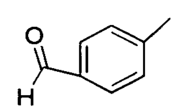
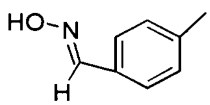
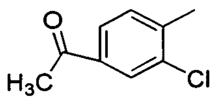
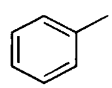
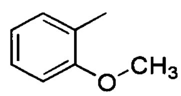
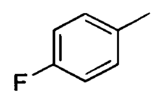
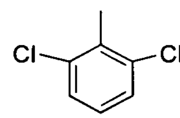
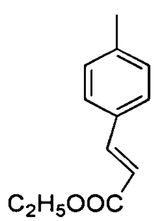
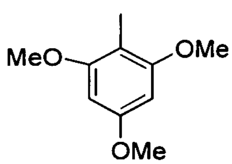
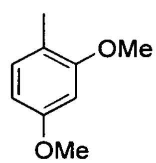
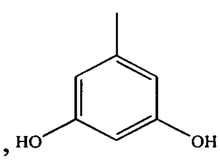
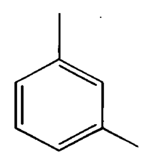
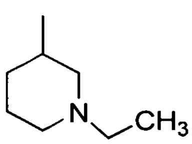
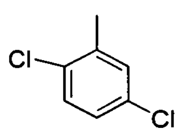
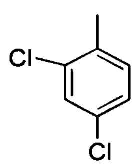
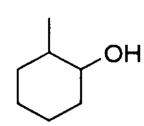
16. A compound as claimed in Claim 14 of the formula XXIVa:

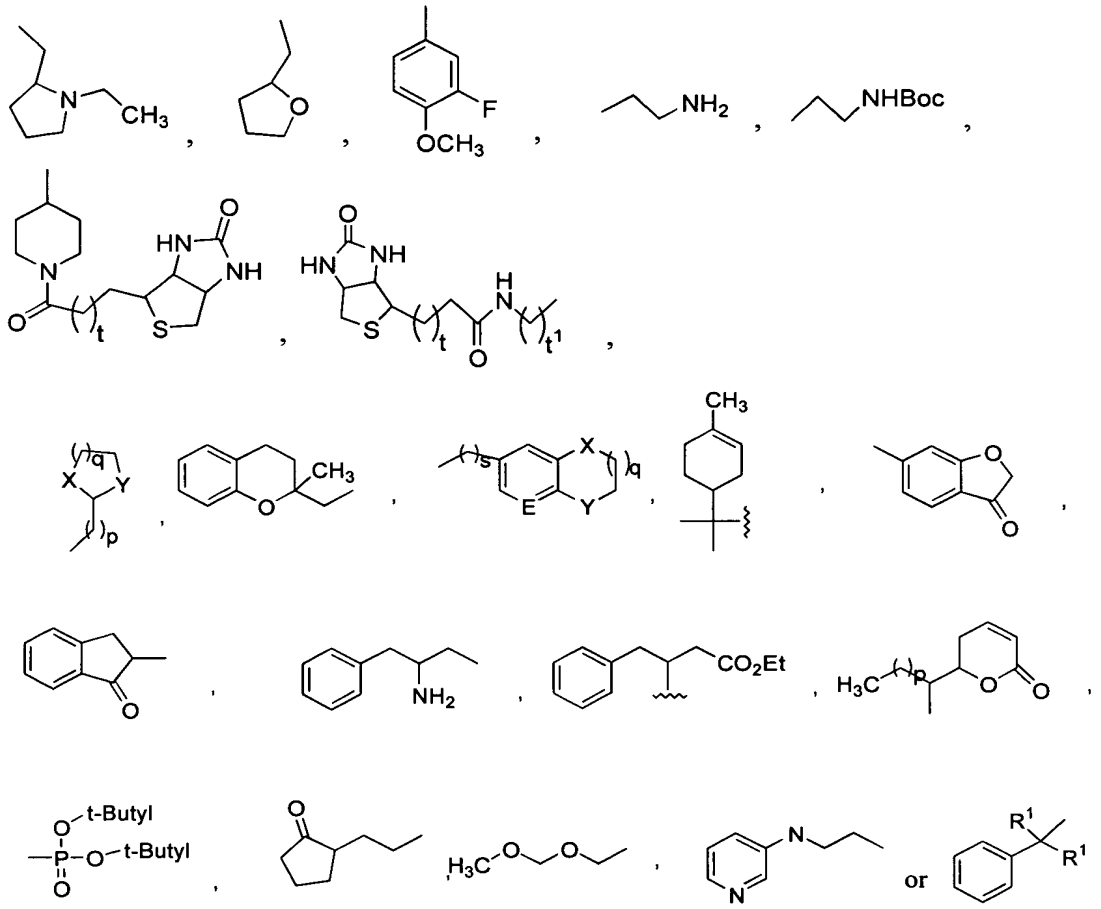


(XXIVa)

, or a salt thereof;

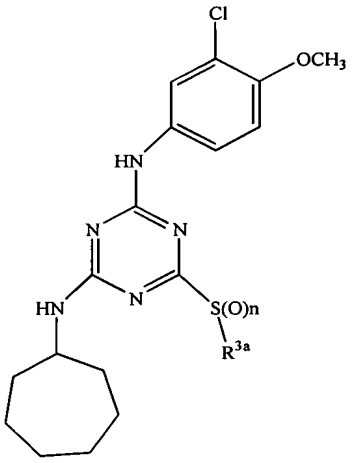
wherein p^1 is 0;

wherein R^{3a} is selected from  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,



wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive.

17. A compound as claimed in Claim 14 of the formula XXVa:

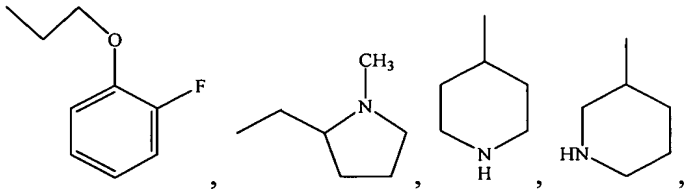


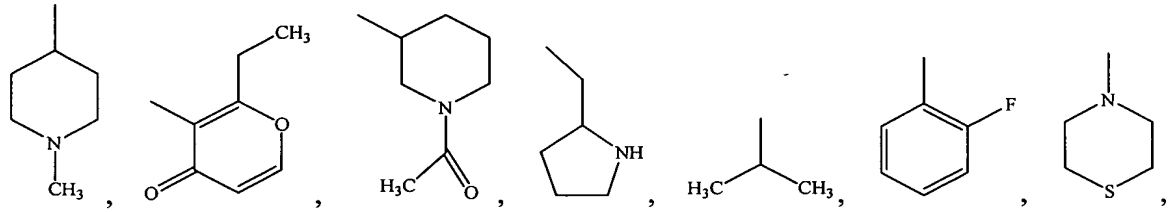
(XXVa)

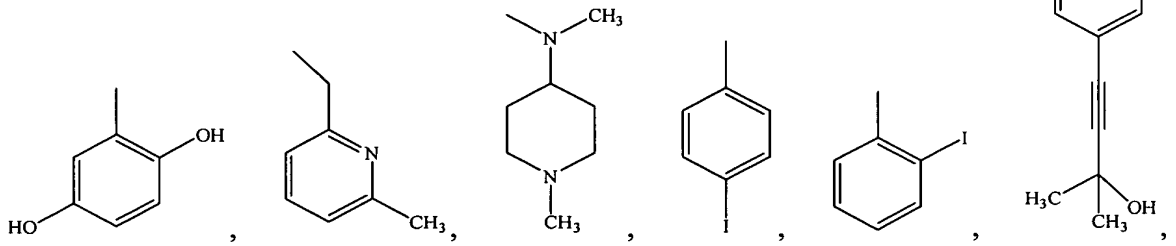
, or a salt thereof,

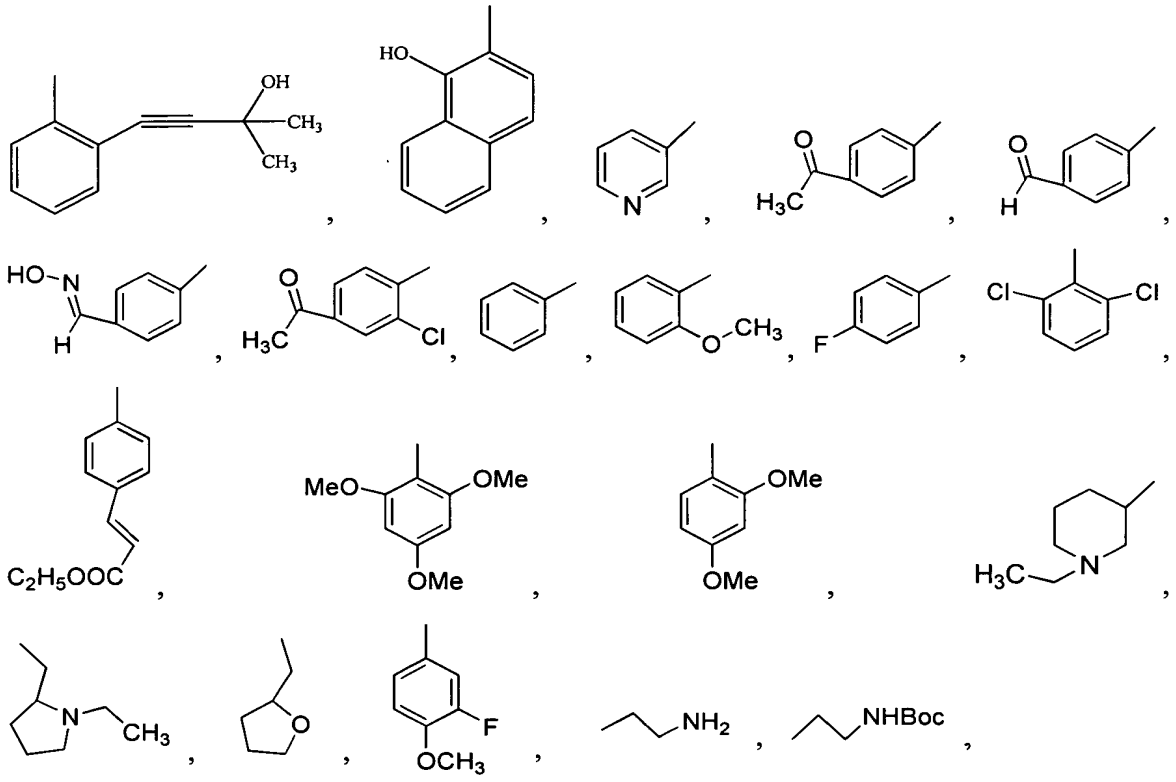
wherein n is selected from 0, 1, or 2; and

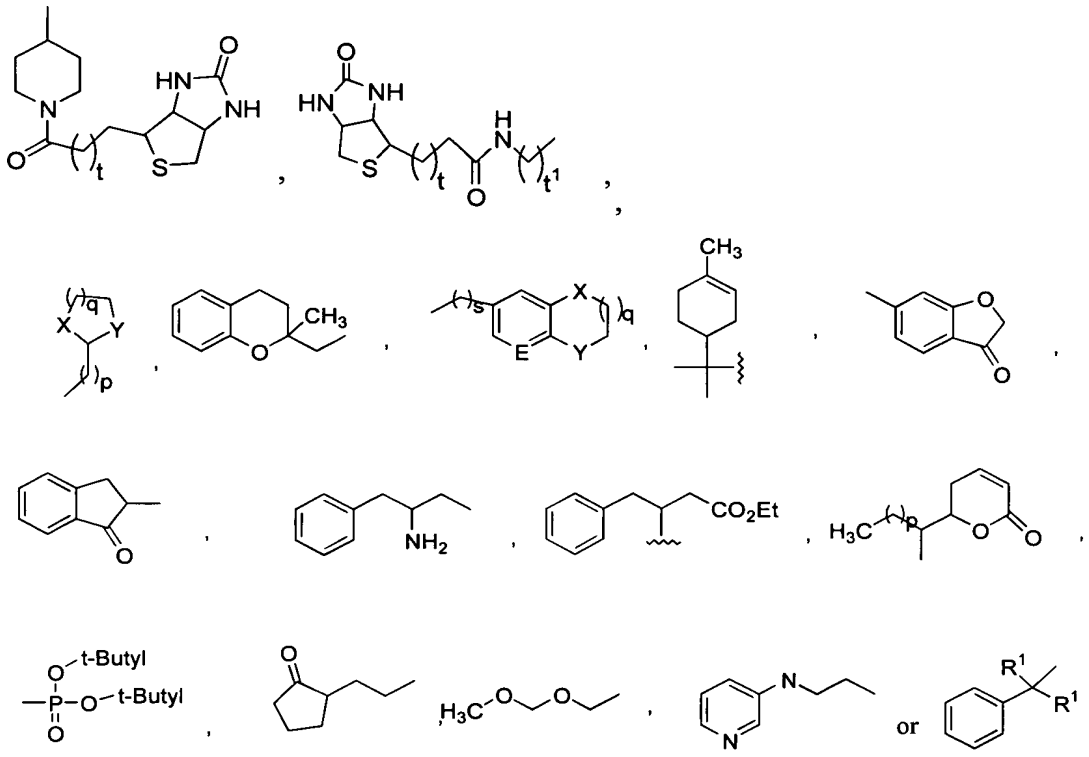
wherein R^{3a} is selected from,











wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive.

18. A composition comprising a compound of the formula XXIIIa, as claimed in Claim 14.

19. The composition as claimed in Claim 18, further comprising:
a pharmaceutically acceptable carrier;
optionally, a pharmaceutically acceptable auxiliary;
optionally, a pharmaceutically acceptable preservative; and
optionally, a pharmaceutically acceptable excipient.

20. The composition as claimed in Claim 18, further comprising an agent selected from a chemotherapeutic agent, an immunosuppressive agent, a cytokine, a cytotoxic agent, a nucleolytic compound, a radioactive isotope, a receptor, a pro-drug activating enzyme, an anti-inflammatory agent, an antirheumatic agent, a cardiovascular agent, a toxin, or any combination thereof.

21. The composition as claimed in Claim 18, wherein the composition is in the form of a tablet, a capsule, a cachet, a powder, a granule, a solution, a suspension, an emulsion, a bolus, a lozenge, a suppository, a pessary, a tampon, a cream, a gel, a paste, a foam, a spray, an aerosol, a microcapsule, a liposome, a transdermal patch, a pastille, a paste, or a mouthwash.

22. A medical device comprising:
a drug delivering or eluting member; and
a composition in accordance with Claim 18 disposed on or within the drug delivering or eluting member.

23. The medical device as claimed in Claim 22, wherein the drug delivering or eluting member is a stent.

24. The medical device as claimed in Claim 22, wherein the drug delivering or eluting member is selected from a shunt, a colostomy bag attachment device, an ear drainage tube, a lead for a pacemaker, a lead for an implantable defibrillator, a suture, a staple, an anastornosis device, a vertebral disk, a bone pin, a suture anchor, a hemostatic barrier, a clamp, a screw, a plate, a clip, a vascular implant, a tissue adhesive, a tissue sealant, a tissue scaffold, a bone substitute, an intraluminal device, a stent, or a vascular support.

25. A microarray comprising:

a gene expression profile generated from a cell type treated with a compound of the formula XXIIIa, as claimed in Claim 14.

26. The microarray as claimed in Claim 25, wherein the cell type is selected from the group of cells comprising coronary artery endothelium, umbilical artery endothelium, umbilical vein endothelium, aortic endothelium, dermal microvascular endothelium, pulmonary artery endothelium, myometrium microvascular endothelium, keratinocyte epithelium, bronchial epithelium, mammary epithelium, prostate epithelium, renal cortical epithelium, renal proximal tubule epithelium, small airway epithelium, renal epithelium, umbilical artery smooth muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle, dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes, aortic smooth muscle, mesangial cells, coronary artery smooth muscle, bronchial smooth muscle, uterine smooth muscle, lung fibroblast, osteoblasts, or prostate stromal cells.

27. An expression profile database comprising:

a patient identifying reference; and

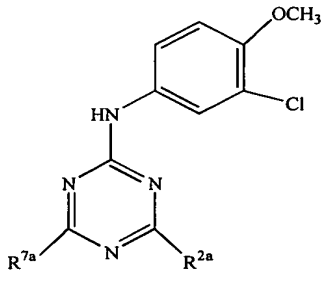
an expression profile for the patient generated by administering to the patient a compound of the formula XXIIIa, as claimed in Claim 14.

28. A method of treating unwanted cellular proliferation, treating an inflammation mediated disease, treating a hyperproliferative disease, or modulating a glycosidase enzyme in a human or an animal comprising administering to the human or animal a therapeutically effective amount of a composition comprising a compound of the formula XXIIIa, as claimed in Claim 14.

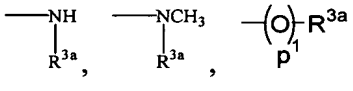
29. The method as claimed in Claim 28, wherein the compound is present in the composition in an amount effective upon administration in a daily dose, a daily sub-dose, or any appropriate fraction thereof to the human or animal to reduce the effects of the disease, to reduce the effects of the unwanted cellular proliferation, to reduce the effects of the

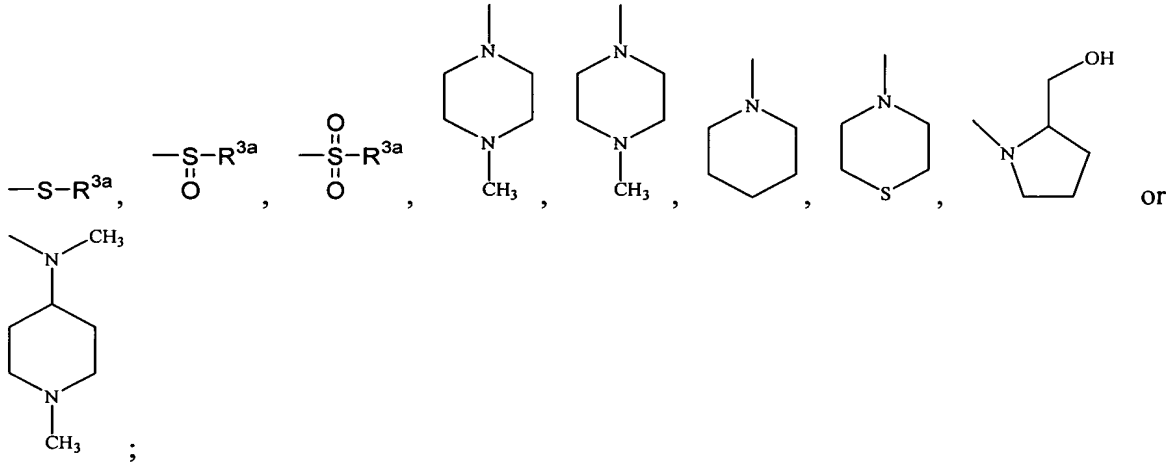
inflammation mediated disease, to reduce the effects of the hyperproliferative disease, or to modulate the glycosidase enzyme.

30. A compound of the formula IIa_1:

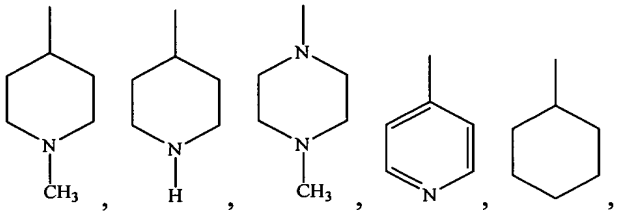
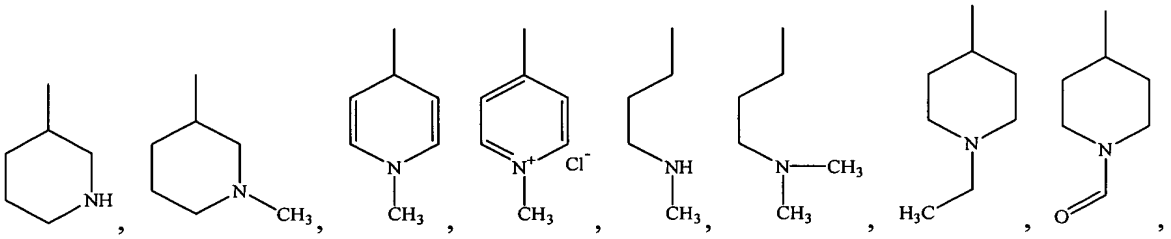
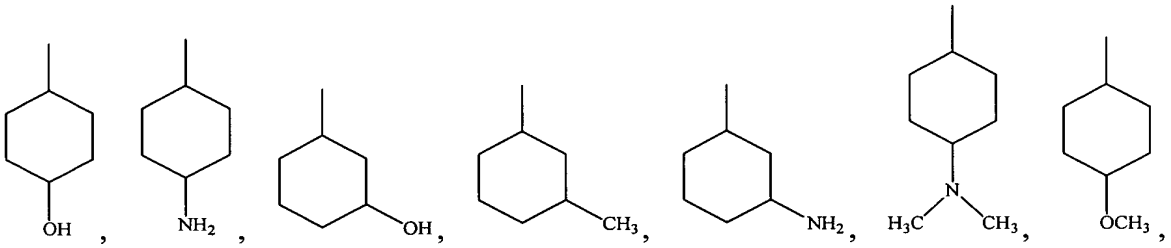
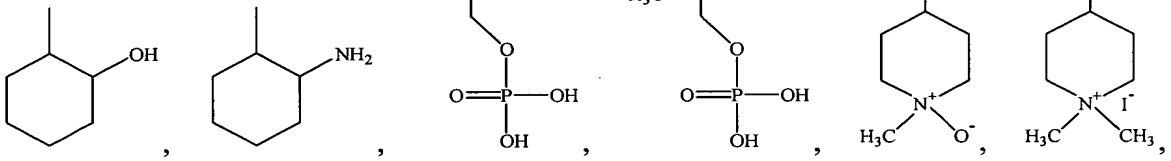
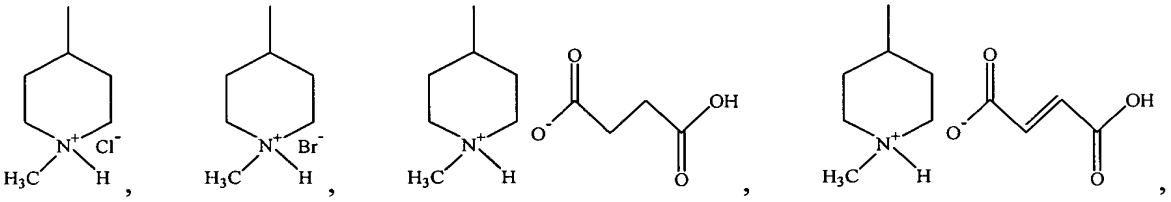


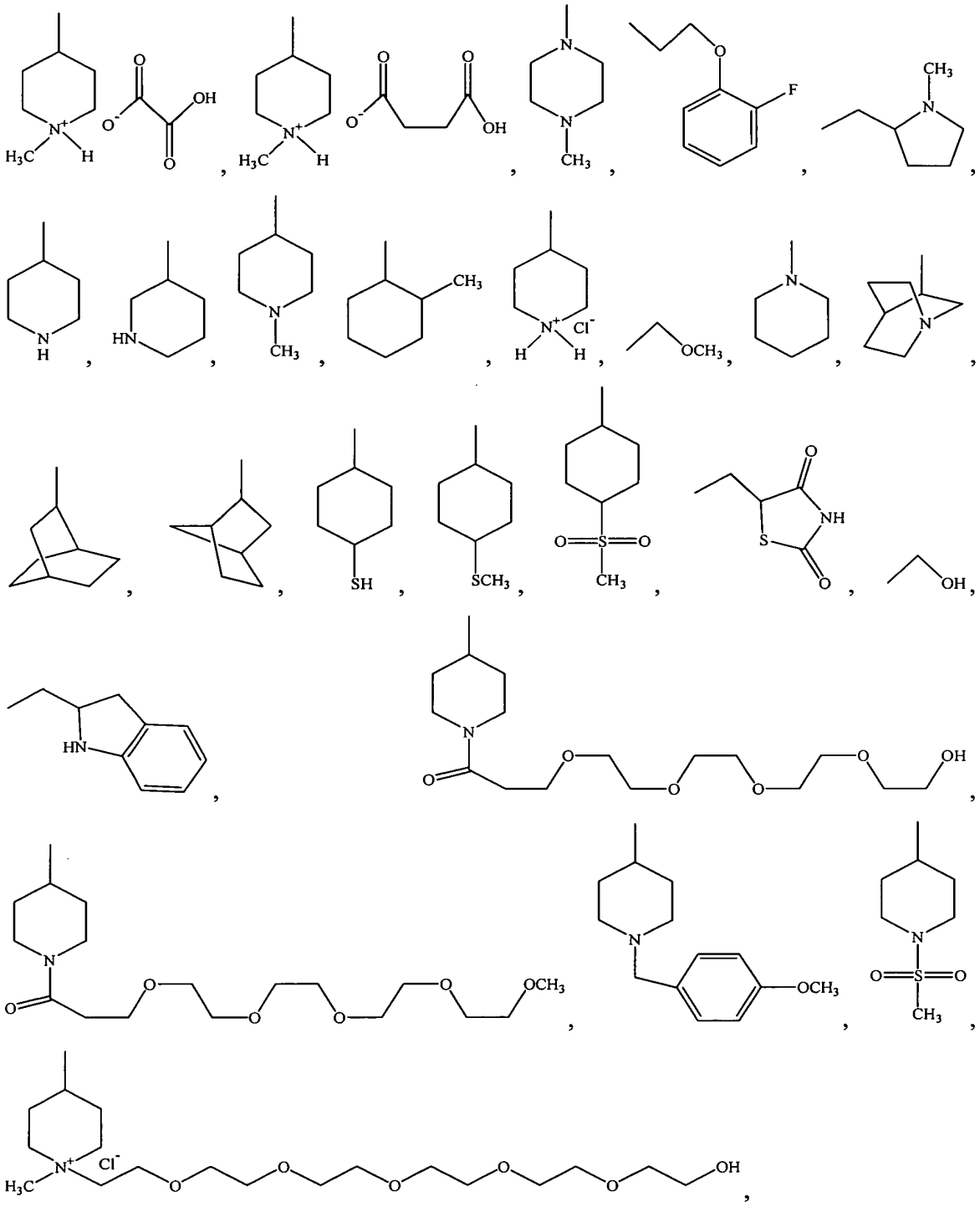
(IIa_1), or a salt thereof,

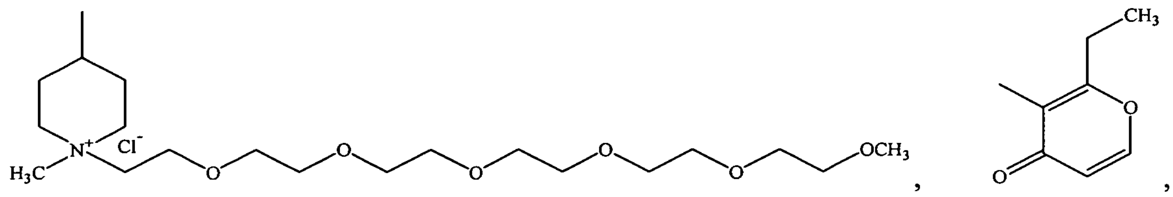
wherein R^{2a} is selected from  , wherein p^1 is 0 or 1,

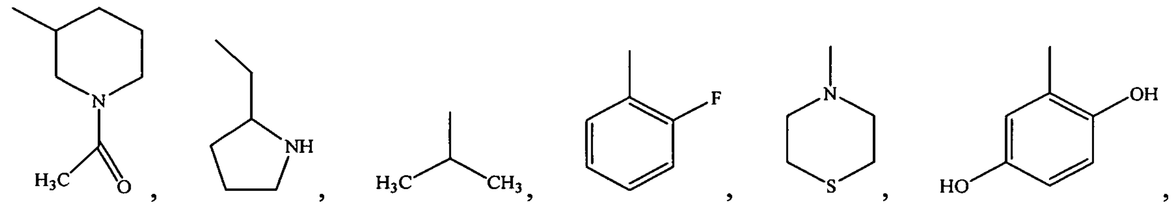


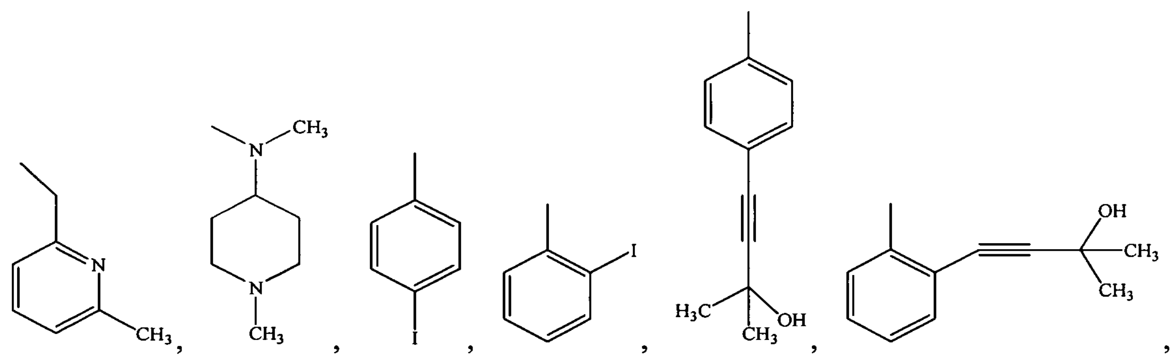
;

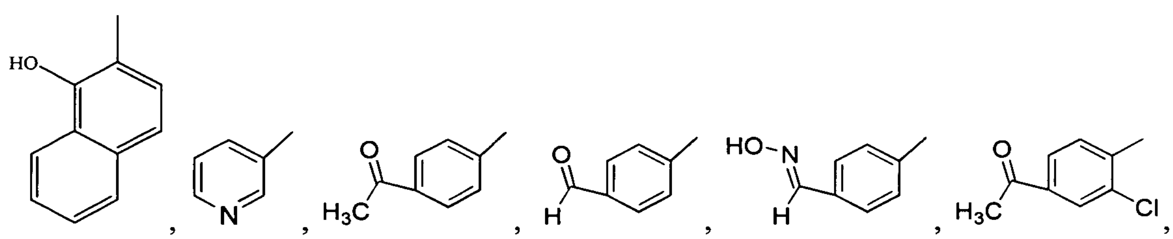
wherein R^{3a} is selected from –H,  ,  ,  ,  ,  .

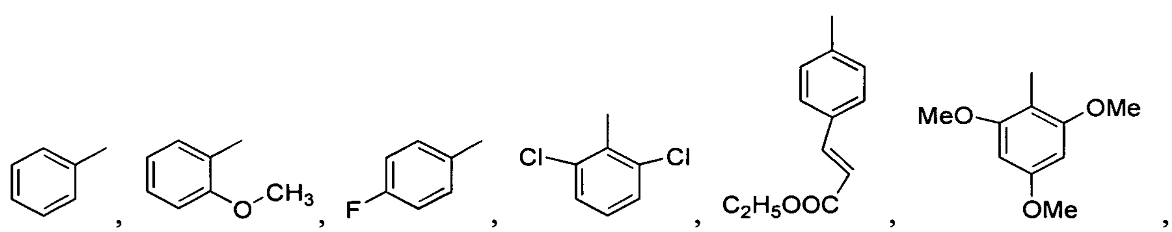


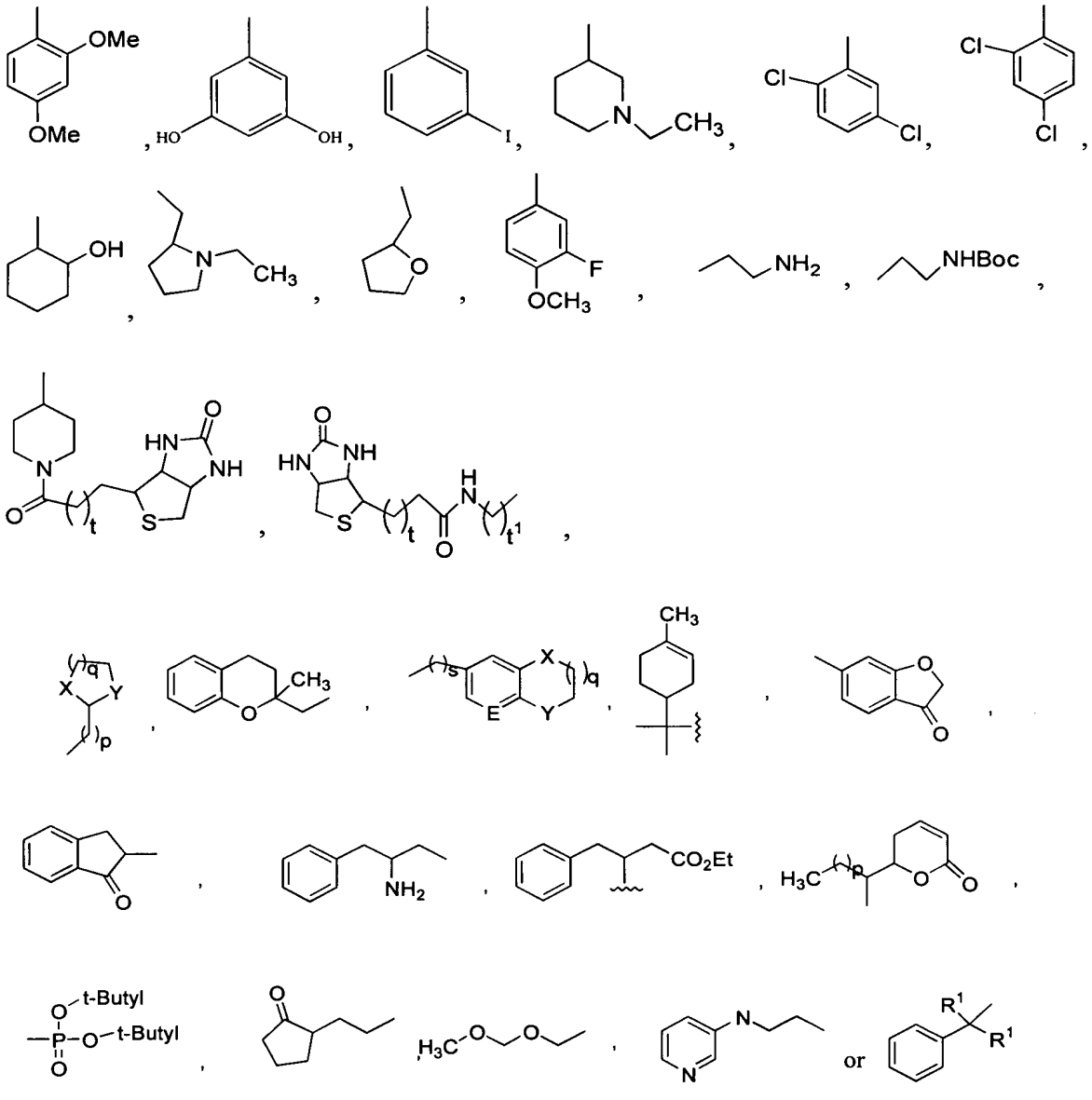




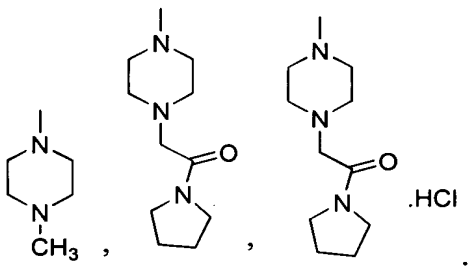








wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive; and

wherein R^{7a} is selected from  .

31. A composition comprising a compound of the formula IIa_1, as claimed in Claim 30.

32. The composition as claimed in Claim 31, further comprising:
a pharmaceutically acceptable carrier;
optionally, a pharmaceutically acceptable auxiliary;
optionally, a pharmaceutically acceptable preservative; and
optionally, a pharmaceutically acceptable excipient.

33. The composition as claimed in Claim 31, further comprising an agent selected from a chemotherapeutic agent, an immunosuppressive agent, a cytokine, a cytotoxic agent, a nucleolytic compound, a radioactive isotope, a receptor, a pro-drug activating enzyme, an anti-inflammatory agent, an antirheumatic agent, a cardiovascular agent, a toxin, or any combination thereof.

34. The composition as claimed in Claim 31, wherein the composition is in the form of a tablet, a capsule, a cachet, a powder, a granule, a solution, a suspension, an emulsion, a bolus, a lozenge, a suppository, a pessary, a tampon, a cream, a gel, a paste, a foam, a spray, an aerosol, a microcapsule, a liposome, a transdermal patch, a pastille, a paste, or a mouthwash.

35. A medical device comprising:

a drug delivering or eluting member; and

a composition in accordance with Claim 31 disposed on or within the drug delivering or eluting member.

36. The medical device as claimed in Claim 35, wherein the drug delivering or eluting member is a stent.

37. The medical device as claimed in Claim 35, wherein the drug delivering or eluting member is selected from a shunt, a colostomy bag attachment device, an ear drainage tube, a lead for a pacemaker, a lead for an implantable defibrillator, a suture, a staple, an anastornosis device, a vertebral disk, a bone pin, a suture anchor, a hemostatic barrier, a clamp, a screw, a plate, a clip, a vascular implant, a tissue adhesive, a tissue sealant, a tissue scaffold, a bone substitute, an intraluminal device, a stent, or a vascular support.

38. A microarray comprising:

a gene expression profile generated from a cell type treated with a compound of the formula IIa_1, as claimed in Claim 30.

39. The microarray as claimed in Claim 38, wherein the cell type is selected from the group of cells comprising coronary artery endothelium, umbilical artery endothelium, umbilical vein endothelium, aortic endothelium, dermal microvascular endothelium, pulmonary artery endothelium, myometrium microvascular endothelium, keratinocyte epithelium, bronchial epithelium, mammary epithelium, prostate epithelium, renal cortical epithelium, renal proximal tubule epithelium, small airway epithelium, renal epithelium, umbilical artery smooth muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle, dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes, aortic smooth muscle, mesangial cells, coronary artery smooth muscle, bronchial smooth muscle, uterine smooth muscle, lung fibroblast, osteoblasts, or prostate stromal cells.

40. An expression profile database comprising:

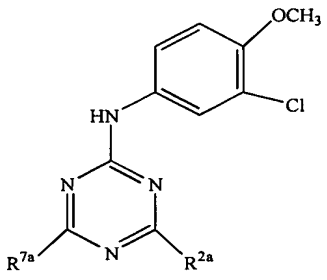
a patient identifying reference; and

an expression profile for the patient generated by administering to the patient a compound of the formula IIa_1, as claimed in Claim 30.

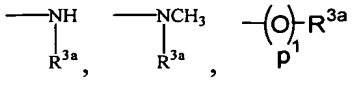
41. A method of treating unwanted cellular proliferation, treating an inflammation mediated disease, treating a hyperproliferative disease, or modulating a glycosidase enzyme in a human or an animal comprising administering to the human or animal a therapeutically effective amount of a composition comprising a compound of the formula IIa_1, as claimed in Claim 30.

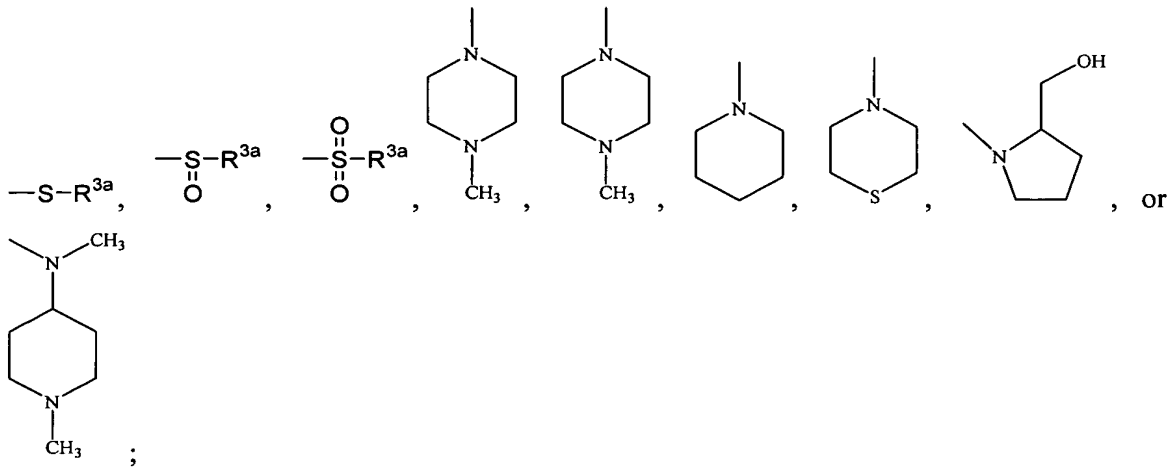
42. The method as claimed in Claim 41, wherein the compound is present in the composition in an amount effective upon administration in a daily dose, a daily sub-dose, or any appropriate fraction thereof to the human or animal to reduce the effects of the disease, to reduce the effects of the unwanted cellular proliferation, to reduce the effects of the inflammation mediated disease, to reduce the effects of the hyperproliferative disease, or to modulate the glycosidase enzyme.

43. A compound of the formula IIa_1:



(IIa_1), or a salt thereof,

wherein R^{2a} is selected from  , wherein p^1 is 0 or 1,



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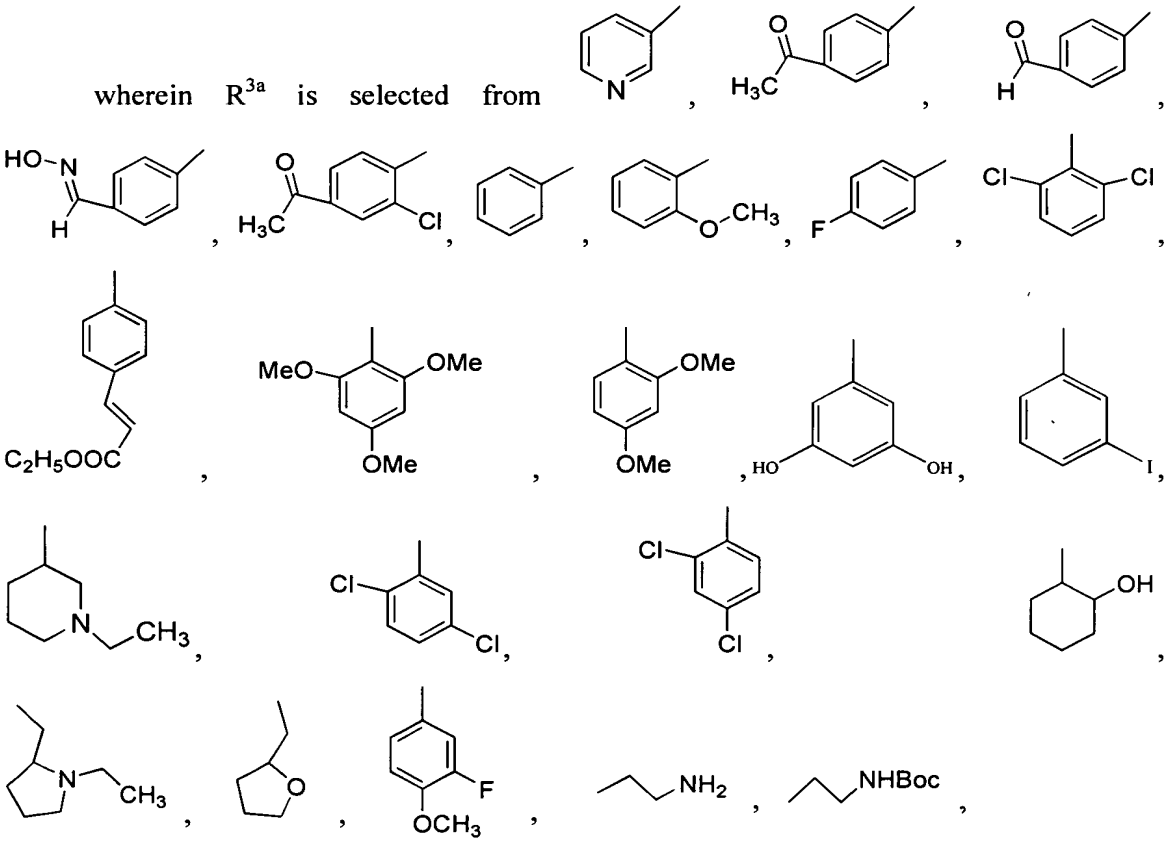
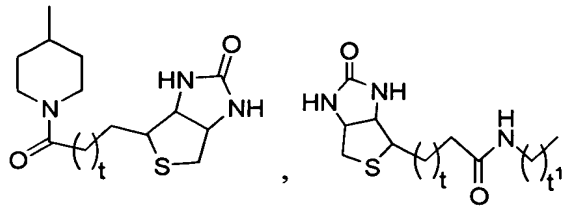
wherein R^{3a} is selected from 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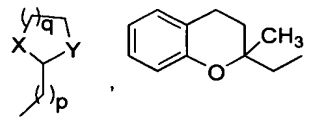
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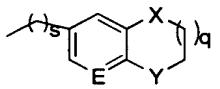
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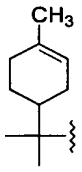
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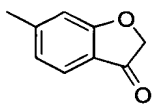
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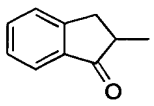
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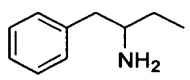
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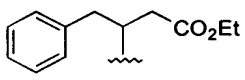
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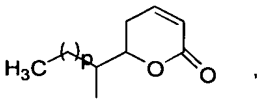
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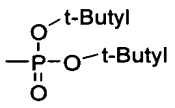
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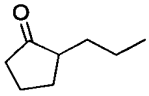
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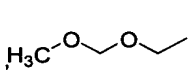
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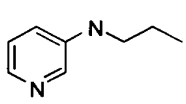
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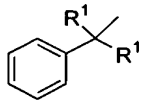
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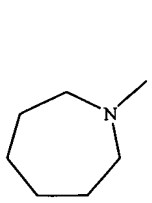
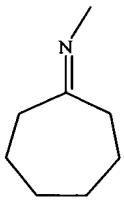
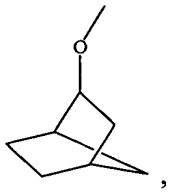
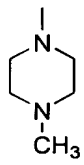
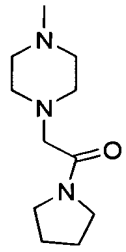
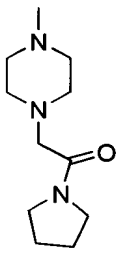
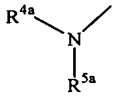
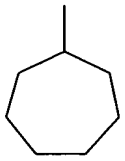
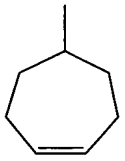
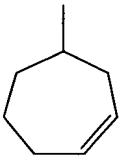
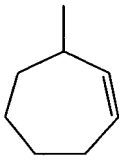
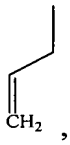
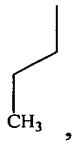
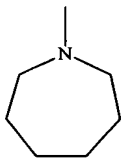
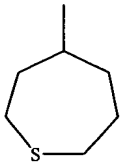
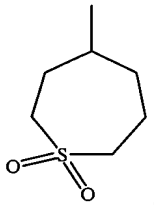
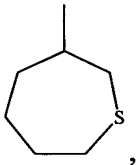
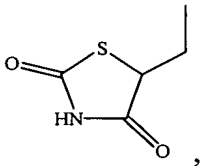
wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive;

wherein R^{7a} is selected from  ,  ,  ,

 ,  ,  .HCl or  ;

wherein R^{4a} is selected from –H or $–CH_3$; and

wherein R^{5a} is selected from  ,  ,  ,  ,  ,

 ,  ,  ,  ,  ,  , or  , or  .

44. A composition comprising a compound of the formula IIa_1, as claimed in Claim 43.

45. The composition as claimed in Claim 44, further comprising:
a pharmaceutically acceptable carrier;
optionally, a pharmaceutically acceptable auxiliary;
optionally, a pharmaceutically acceptable preservative; and
optionally, a pharmaceutically acceptable excipient.

46. The composition as claimed in Claim 44, further comprising an agent selected from a chemotherapeutic agent, an immunosuppressive agent, a cytokine, a cytotoxic agent, a nucleolytic compound, a radioactive isotope, a receptor, a pro-drug activating enzyme, an anti-inflammatory agent, an antirheumatic agent, a cardiovascular agent, a toxin, or any combination thereof.

47. The composition as claimed in Claim 44, wherein the composition is in the form of a tablet, a capsule, a cachet, a powder, a granule, a solution, a suspension, an emulsion, a bolus, a lozenge, a suppository, a pessary, a tampon, a cream, a gel, a paste, a foam, a spray, an aerosol, a microcapsule, a liposome, a transdermal patch, a pastille, a paste, or a mouthwash.

48. A medical device comprising:

a drug delivering or eluting member; and

a composition in accordance with Claim 44 disposed on or within the drug delivering or eluting member.

49. The medical device as claimed in Claim 48, wherein the drug delivering or eluting member is a stent.

50. The medical device as claimed in Claim 48, wherein the drug delivering or eluting member is selected from a shunt, a colostomy bag attachment device, an ear drainage tube, a lead for a pacemaker, a lead for an implantable defibrillator, a suture, a staple, an anastornosis device, a vertebral disk, a bone pin, a suture anchor, a hemostatic barrier, a clamp, a screw, a plate, a clip, a vascular implant, a tissue adhesive, a tissue sealant, a tissue scaffold, a bone substitute, an intraluminal device, a stent, or a vascular support.

51. A microarray comprising:

a gene expression profile generated from a cell type treated with a compound of the formula IIa_1, as claimed in Claim 43.

52. The microarray as claimed in Claim 51, wherein the cell type is selected from the group of cells comprising coronary artery endothelium, umbilical artery endothelium, umbilical vein endothelium, aortic endothelium, dermal microvascular endothelium, pulmonary artery endothelium, myometrium microvascular endothelium, keratinocyte epithelium, bronchial epithelium, mammary epithelium, prostate epithelium, renal cortical epithelium, renal proximal tubule epithelium, small airway epithelium, renal epithelium, umbilical artery smooth muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle, dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes, aortic smooth muscle, mesangial cells, coronary artery smooth muscle, bronchial smooth muscle, uterine smooth muscle, lung fibroblast, osteoblasts, or prostate stromal cells.

53. An expression profile database comprising:

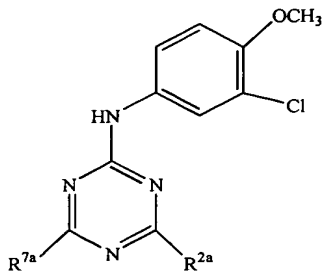
a patient identifying reference; and

an expression profile for the patient generated by administering to the patient a compound of the formula IIa_1, as claimed in Claim 43.

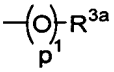
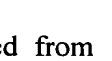
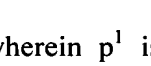
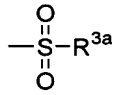
54. A method of treating unwanted cellular proliferation, treating an inflammation mediated disease, treating a hyperproliferative disease, or modulating a glycosidase enzyme in a human or an animal comprising administering to the human or animal a therapeutically effective amount of a composition comprising a compound of the formula IIa_1, as claimed in Claim 43.

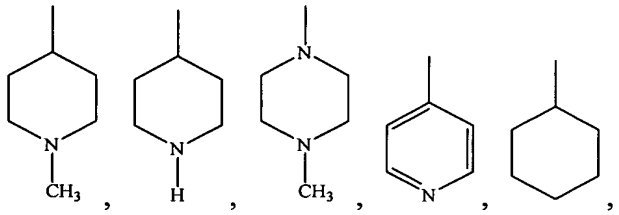
55. The method as claimed in Claim 54, wherein the compound is present in the composition in an amount effective upon administration in a daily dose, a daily sub-dose, or any appropriate fraction thereof to the human or animal to reduce the effects of the disease, to reduce the effects of the unwanted cellular proliferation, to reduce the effects of the inflammation mediated disease, to reduce the effects of the hyperproliferative disease, or to modulate the glycosidase enzyme.

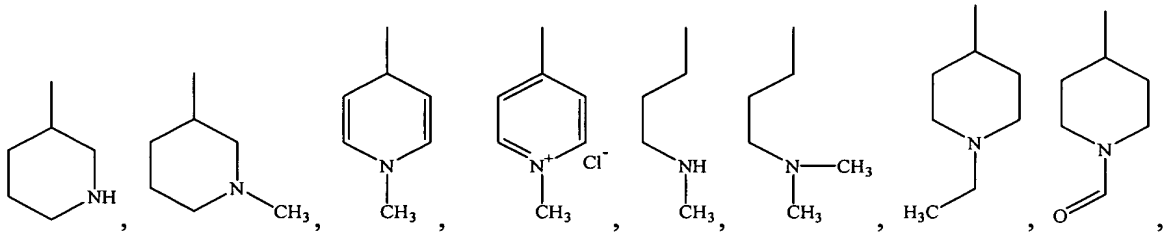
56. A compound of the formula IIa_1:

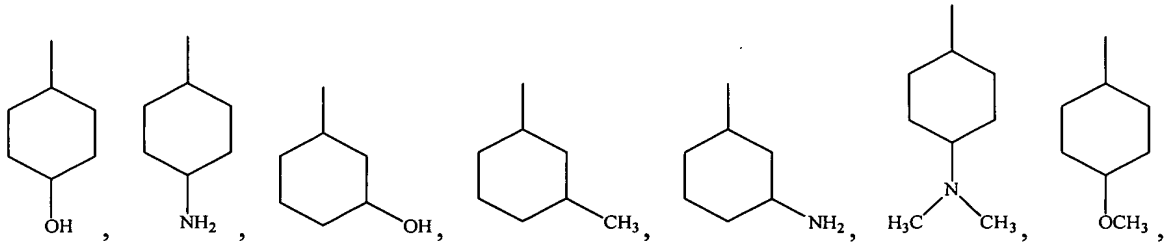


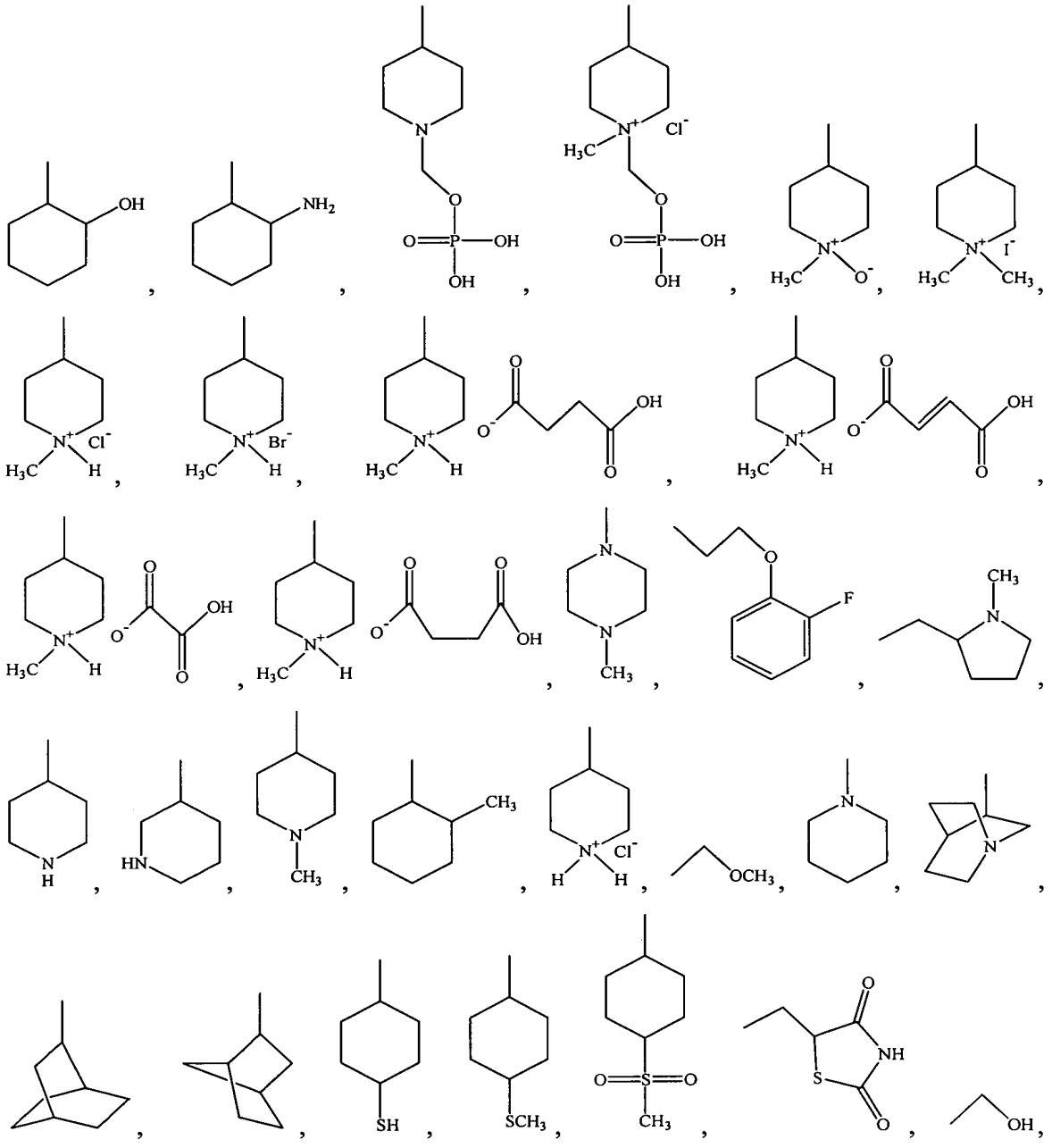
(IIa$_1$), or a salt thereof,

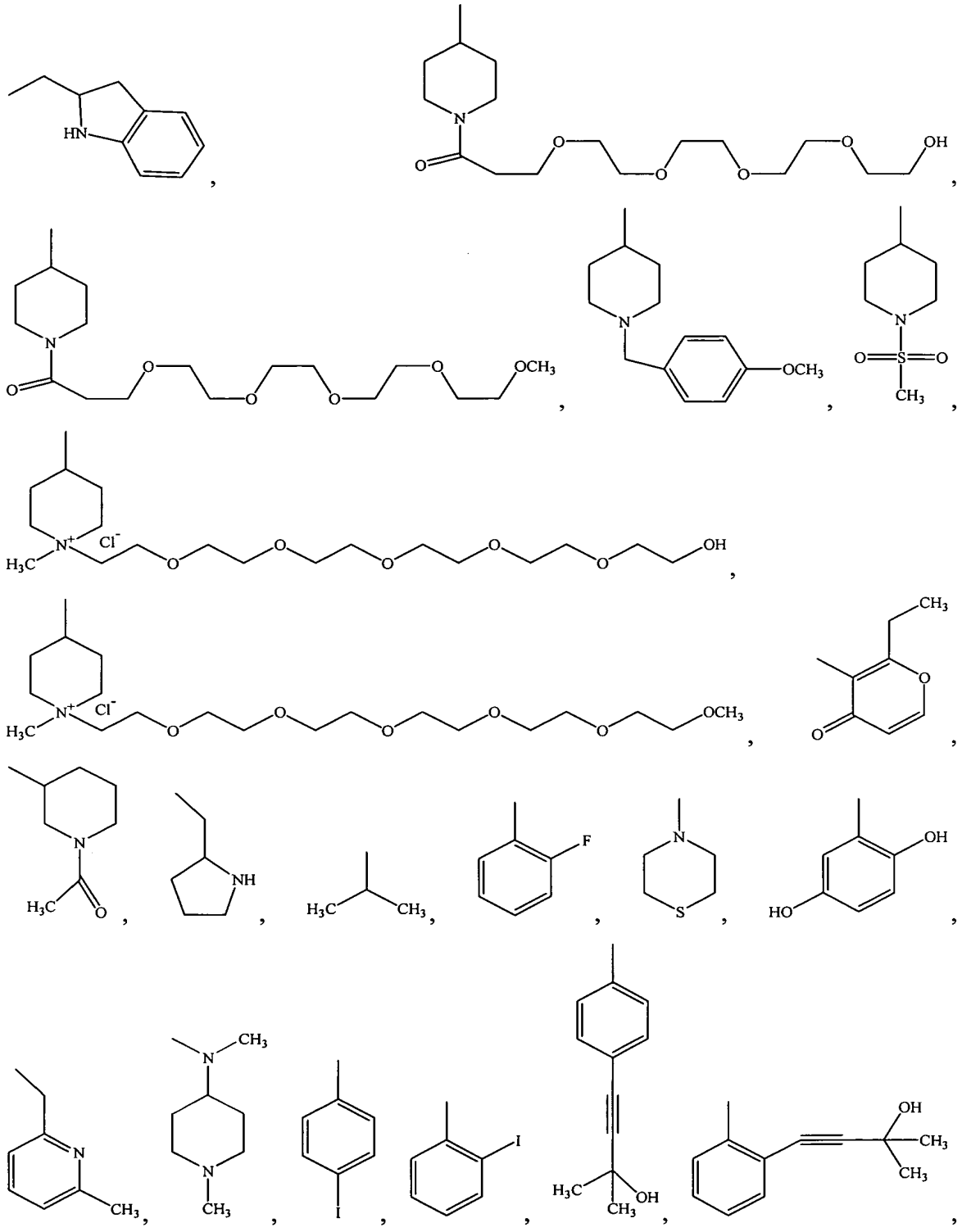
wherein R^{2a} is selected from  wherein p^1 is 0,  ,  , or  ;

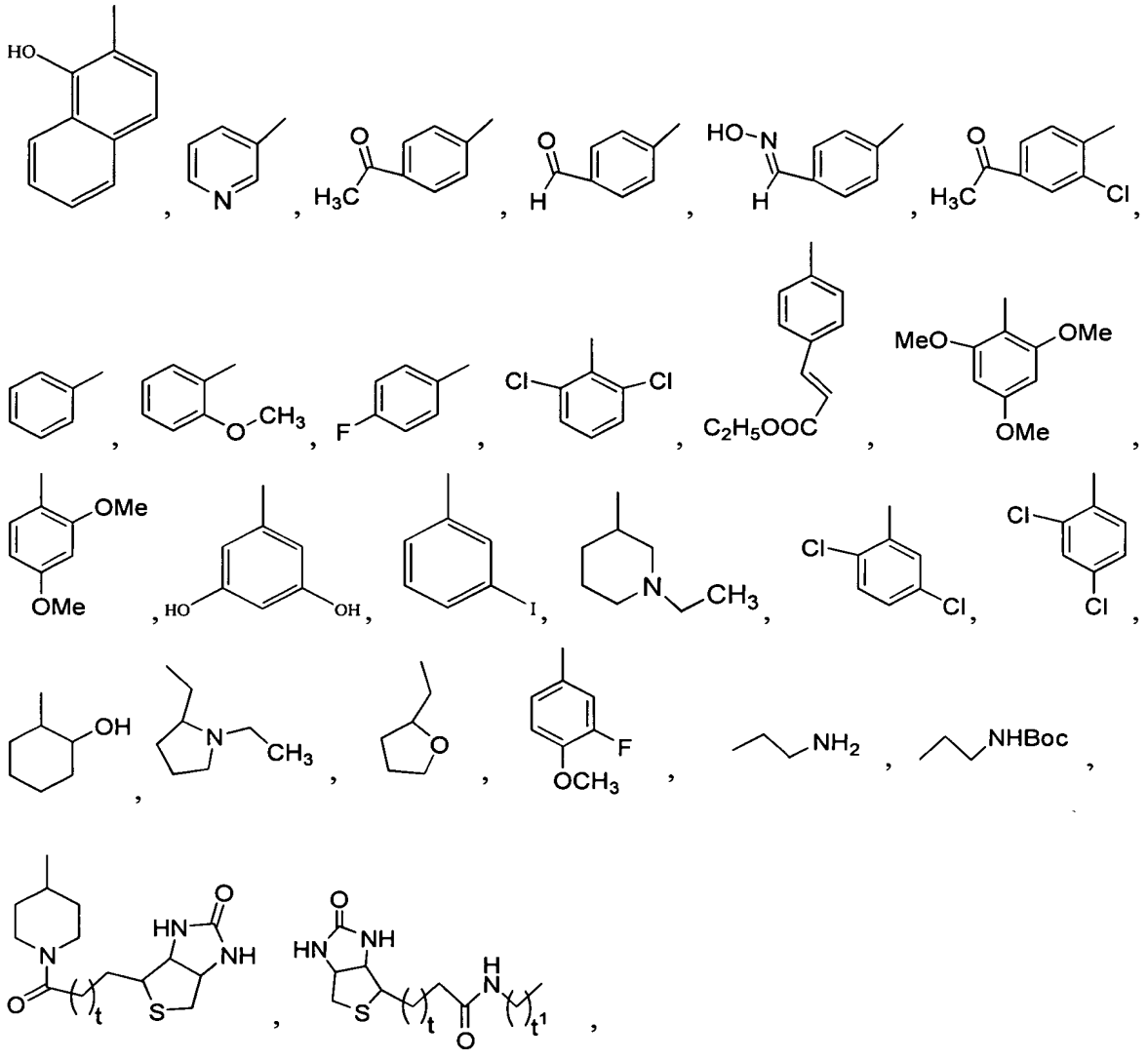
wherein R^{3a} is selected from –H, 

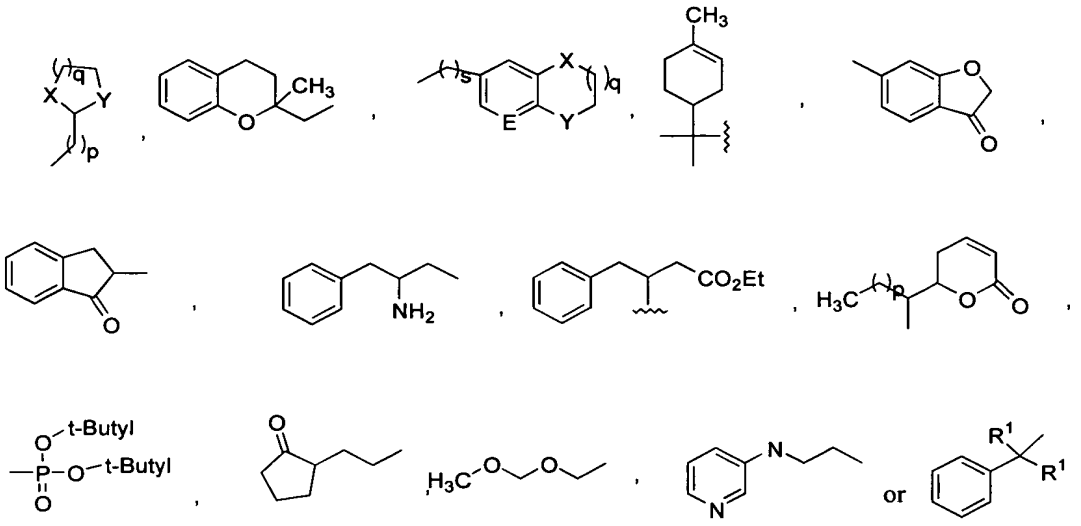




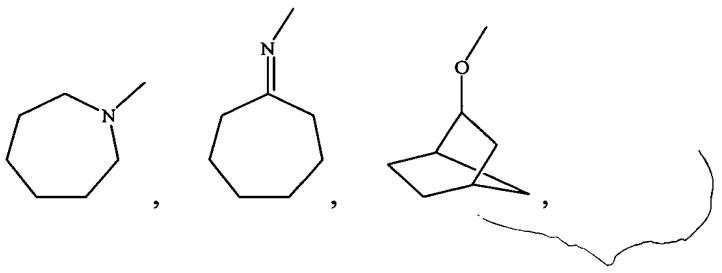


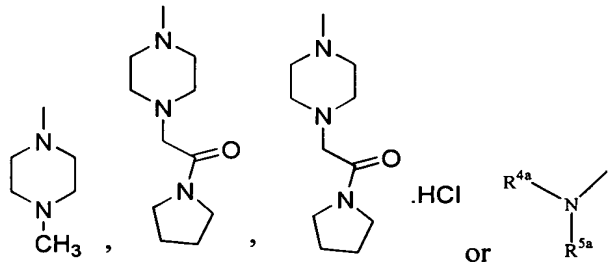




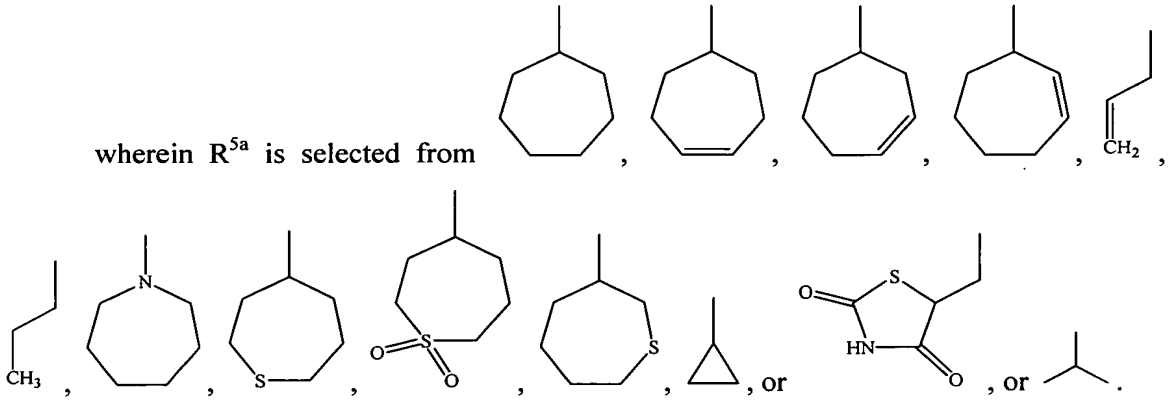


wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive;

wherein R^{7a} is selected from 



wherein R^{4a} is selected from –H or $–CH_3$; and

wherein R^{5a} is selected from 

57. A composition comprising a compound of the formula IIa_1, as claimed in Claim 56.

58. The composition as claimed in Claim 57, further comprising:
a pharmaceutically acceptable carrier;
optionally, a pharmaceutically acceptable auxiliary;
optionally, a pharmaceutically acceptable preservative; and
optionally, a pharmaceutically acceptable excipient.

59. The composition as claimed in Claim 57, further comprising an agent selected from a chemotherapeutic agent, an immunosuppressive agent, a cytokine, a cytotoxic agent, a nucleolytic compound, a radioactive isotope, a receptor, a pro-drug activating enzyme, an anti-inflammatory agent, an antirheumatic agent, a cardiovascular agent, a toxin, or any combination thereof.

60. The composition as claimed in Claim 57, wherein the composition is in the form of a tablet, a capsule, a cachet, a powder, a granule, a solution, a suspension, an emulsion, a bolus, a lozenge, a suppository, a pessary, a tampon, a cream, a gel, a paste, a foam, a spray, an aerosol, a microcapsule, a liposome, a transdermal patch, a pastille, a paste, or a mouthwash.

61. A medical device comprising:

a drug delivering or eluting member; and

a composition in accordance with Claim 57 disposed on or within the drug delivering or eluting member.

62. The medical device as claimed in Claim 61, wherein the drug delivering or eluting member is a stent.

63. The medical device as claimed in Claim 61, wherein the drug delivering or eluting member is selected from a shunt, a colostomy bag attachment device, an ear drainage tube, a lead for a pacemaker, a lead for an implantable defibrillator, a suture, a staple, an anastornosis device, a vertebral disk, a bone pin, a suture anchor, a hemostatic barrier, a clamp, a screw, a plate, a clip, a vascular implant, a tissue adhesive, a tissue sealant, a tissue scaffold, a bone substitute, an intraluminal device, a stent, or a vascular support.

64. A microarray comprising:

a gene expression profile generated from a cell type treated with a compound of the formula IIa_1, as claimed in Claim 56.

65. The microarray as claimed in Claim 64, wherein the cell type is selected from the group of cells comprising coronary artery endothelium, umbilical artery endothelium, umbilical vein endothelium, aortic endothelium, dermal microvascular endothelium, pulmonary artery endothelium, myometrium microvascular endothelium, keratinocyte epithelium, bronchial epithelium, mammary epithelium, prostate epithelium, renal cortical epithelium, renal proximal tubule epithelium, small airway epithelium, renal epithelium, umbilical artery smooth muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle, dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes, aortic smooth muscle, mesangial cells, coronary artery smooth muscle, bronchial smooth muscle, uterine smooth muscle, lung fibroblast, osteoblasts, or prostate stromal cells.

66. An expression profile database comprising:

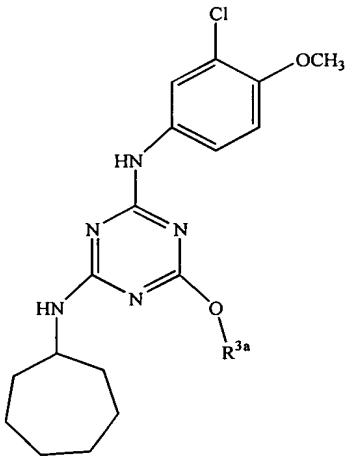
a patient identifying reference; and

an expression profile for the patient generated by administering to the patient a compound of the formula IIa_1, as claimed in Claim 56.

67. A method of treating unwanted cellular proliferation, treating an inflammation mediated disease, treating a hyperproliferative disease, or modulating a glycosidase enzyme in a human or an animal comprising administering to the human or animal a therapeutically effective amount of a composition comprising a compound of the formula IIa_1, as claimed in Claim 56.

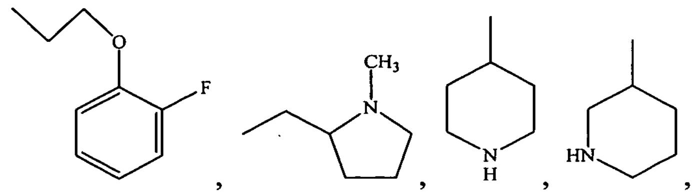
68. The method as claimed in Claim 67, wherein the compound is present in the composition in an amount effective upon administration in a daily dose, a daily sub-dose, or any appropriate fraction thereof to the human or animal to reduce the effects of the disease, to reduce the effects of the unwanted cellular proliferation, to reduce the effects of the inflammation mediated disease, to reduce the effects of the hyperproliferative disease, or to modulate the glycosidase enzyme.

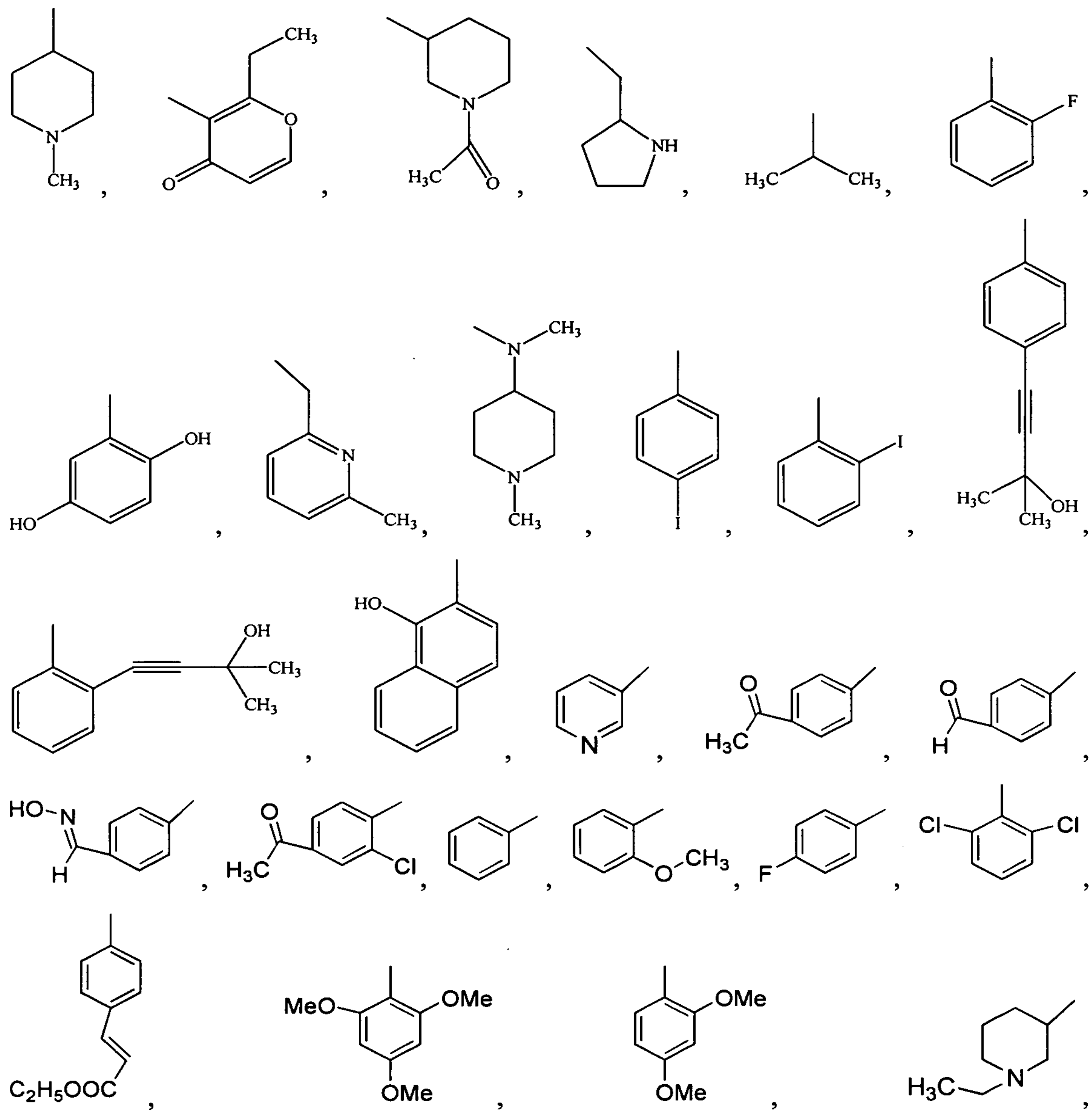
69. A compound of the formula $XXIVa^1$:



($XXIVa^1$)

, or a salt thereof,

wherein R^{3a} is selected from, 



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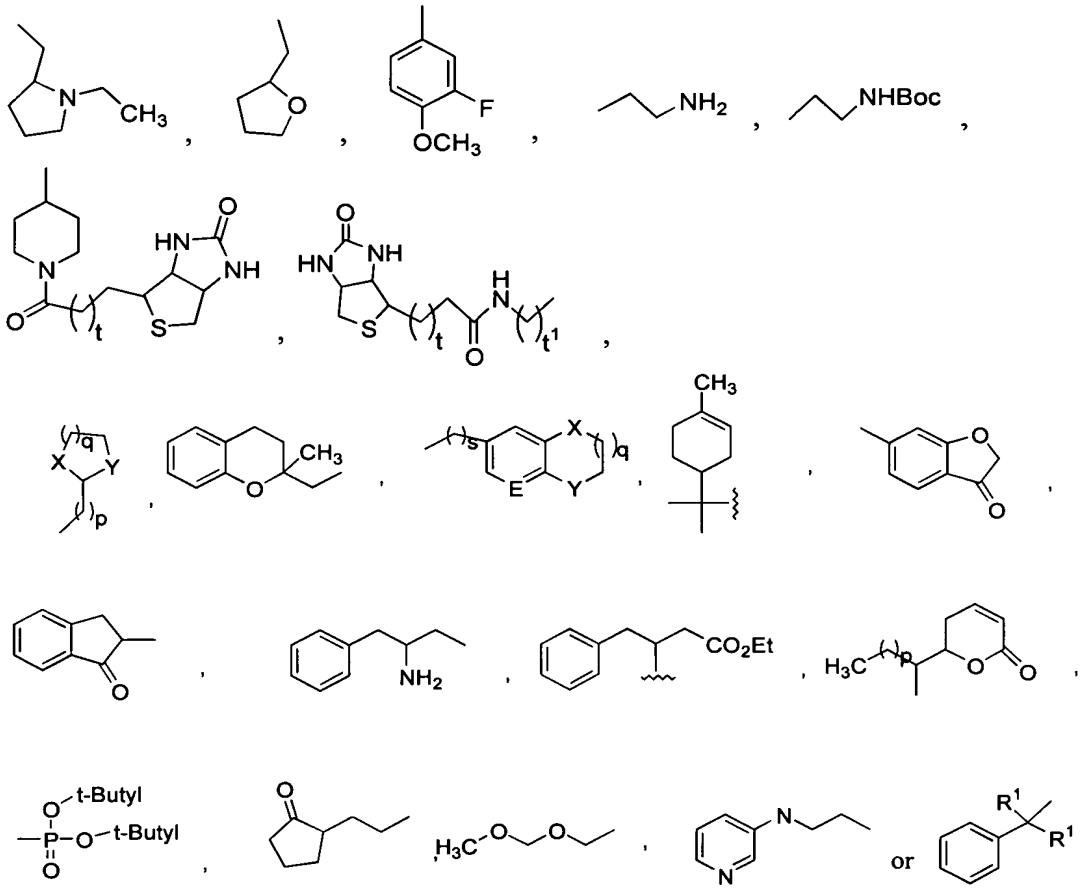

wherein x and y are independently selected from O, S, CH_2, or NH; E is independently selected from CH or N; p, q, r, and s are independently selected from an integer from 0 to 5, inclusive; and t and t^1 are independently selected from an integer from 0 to 10, inclusive.

70. A composition comprising a compound of the formula XXIVa[1] as claimed in Claim 69.

71. The composition as claimed in Claim 70, further comprising:
a pharmaceutically acceptable carrier;
optionally, a pharmaceutically acceptable auxiliary;
optionally, a pharmaceutically acceptable preservative; and
optionally, a pharmaceutically acceptable excipient.

72. The composition as claimed in Claim 70, further comprising an agent selected from a chemotherapeutic agent, an immunosuppressive agent, a cytokine, a cytotoxic agent, a nucleolytic compound, a radioactive isotope, a receptor, a pro-drug activating enzyme, an anti-inflammatory agent, an antirheumatic agent, a cardiovascular agent, a toxin, or any combination thereof.

73. The composition as claimed in Claim 70, wherein the composition is in the form of a tablet, a capsule, a cachet, a powder, a granule, a solution, a suspension, an emulsion, a bolus, a lozenge, a suppository, a pessary, a tampon, a cream, a gel, a paste, a foam, a spray, an aerosol, a microcapsule, a liposome, a transdermal patch, a pastille, a paste, or a mouthwash.

74. A medical device comprising:
a drug delivering or eluting member; and
a composition in accordance with Claim 70 disposed on or within the drug delivering or eluting member.

75. The medical device as claimed in Claim 74, wherein the drug delivering or eluting member is a stent.

76. The medical device as claimed in Claim 74, wherein the drug delivering or eluting member is selected from a shunt, a colostomy bag attachment device, an ear drainage tube, a lead for a pacemaker, a lead for an implantable defibrillator, a suture, a staple, an

anastornosis device, a vertebral disk, a bone pin, a suture anchor, a hemostatic barrier, a clamp, a screw, a plate, a clip, a vascular implant, a tissue adhesive, a tissue sealant, a tissue scaffold, a bone substitute, an intraluminal device, a stent, or a vascular support.

77. A microarray comprising:

a gene expression profile generated from a cell type treated with a compound of the formula XXIVa^1, as claimed in Claim 69.

78. The microarray as claimed in Claim 77, wherein the cell type is selected from the group of cells comprising coronary artery endothelium, umbilical artery endothelium, umbilical vein endothelium, aortic endothelium, dermal microvascular endothelium, pulmonary artery endothelium, myometrium microvascular endothelium, keratinocyte epithelium, bronchial epithelium, mammary epithelium, prostate epithelium, renal cortical epithelium, renal proximal tubule epithelium, small airway epithelium, renal epithelium, umbilical artery smooth muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle, dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes, aortic smooth muscle, mesangial cells, coronary artery smooth muscle, bronchial smooth muscle, uterine smooth muscle, lung fibroblast, osteoblasts, or prostate stromal cells.

79. An expression profile database comprising:

a patient identifying reference; and

an expression profile for the patient generated by administering to the patient a compound of the formula XXIVa^1, as claimed in Claim 69.

80. A method of treating unwanted cellular proliferation, treating an inflammation mediated disease, treating a hyperproliferative disease, or modulating a glycosidase enzyme in a human or an animal comprising administering to the human or animal a therapeutically effective amount of a composition comprising a compound of the formula XXIVa^1, as claimed in Claim 69.

81. The method as claimed in Claim 80, wherein the compound is present in the composition in an amount effective upon administration in a daily dose, a daily sub-dose, or any appropriate fraction thereof to the human or animal to reduce the effects of the disease, to reduce the effects of the unwanted cellular proliferation, to reduce the effects of the inflammation mediated disease, to reduce the effects of the hyperproliferative disease, or to modulate the glycosidase enzyme.

82. A compound selected from:
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-[2-(2-fluoro-phenoxy)-ethoxy]-[1,3,5]triazine-2,4-diamine;
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(1-methyl-pyrrolidin-2-ylmethoxy)-[1,3,5]triazine-2,4-diamine;
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(1-methyl-piperidin-4-yloxy)-[1,3,5]triazine-2,4-diamine;
3-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-2-ethyl-pyran-4-one;
1-{3-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-piperidin-1-yl}-ethanone;
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-isopropoxy-[1,3,5]triazine-2,4-diamine,
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(2-fluoro-phenoxy)-[1,3,5]triazine-2,4-diamine;
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(6-methyl-pyridin-2-yloxy)-[1,3,5]triazine-2,4-diamine;
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(4-iodo-phenoxy)-[1,3,5]triazine-2,4-diamine;
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(2-iodo-phenoxy)-[1,3,5]triazine-2,4-diamine;
4-{4-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-phenyl}-2-methyl-but-3-yn-2-ol;

4-{2-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-phenyl}-2-methyl-but-3-yn-2-ol;

N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(pyridin-3-yloxy)-[1,3,5]triazine-2,4-diamine;

N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(1-ethyl-piperidin-3-yloxy)-[1,3,5]triazine-2,4-diamine;

4-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-benzaldehyde;

3-{4-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-phenyl}-acrylic acid ethyl ester;

1-{4-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-phenyl}-ethanone;

4-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-benzaldehyde oxime;

1-{3-Chloro-4-[4-(3-chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yloxy]-phenyl}-ethanone;

4-{4-[4-(3-Chloro-4-methoxy-phenylamino)-6-isopropylamino-[1,3,5]triazin-2-yloxy]-phenyl}-2-methyl-but-3-yn-2-ol;

N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-phenylsulfanyl-[1,3,5]triazine-2,4-diamine;

N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(2-methoxy-phenylsulfanyl)-[1,3,5]triazine-2,4-diamine;

N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(4-fluoro-phenylsulfanyl)-[1,3,5]triazine-2,4-diamine;

N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(2,6-dichloro-phenylsulfanyl)-[1,3,5]triazine-2,4-diamine;

6-(2-tert-Butyl-phenylsulfanyl)-N-(3-chloro-4-methoxy-phenyl)-N'-cycloheptyl-[1,3,5]triazine-2,4-diamine;

N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(2,4-dimethoxy-phenyl)-[1,3,5]triazine-2,4-diamine;

N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(2,4,6-trimethoxy-phenyl)-[1,3,5]triazine-2,4-diamine;
4-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yl]-benzene-1,3-diol;
1-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yl]-naphthalen-2-ol;
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-6-(tetrahydro-furan-2-ylmethoxy)-[1,3,5]triazine-2,4-diamine;
4-{4-Cycloheptylamino-6-[(1-ethyl-pyrrolidin-2-ylmethyl)-amino]-[1,3,5]triazin-2-ylamino}-cyclohexanol;
N-Cycloheptyl-N'-(1-ethyl-pyrrolidin-2-ylmethyl)-N''-(3-fluoro-4-methyl-phenyl)-[1,3,5]triazine-2,4,6-triamine;
N-Cycloheptyl-N'-(3-fluoro-4-methyl-phenyl)-N''-methyl-N''-(1-methyl-piperidin-4-yl)-[1,3,5]triazine-2,4,6-triamine;
N-Cycloheptyl-N'-methyl-N'-(1-methyl-piperidin-4-yl)-N''-(3-nitro-phenyl)-[1,3,5]triazine-2,4,6-triamine;
N-Cycloheptyl-N'-(3-fluoro-phenyl)-N''-methyl-N''-(1-methyl-piperidin-4-yl)-[1,3,5]triazine-2,4,6-triamine;
N-(4-Benzyloxy-3-chloro-phenyl)-N'-cycloheptyl-N''-(1-ethyl-pyrrolidin-2-ylmethyl)-[1,3,5]triazine-2,4,6-triamine;
N-(3-Chloro-4-methoxy-phenyl)-N'-cycloheptyl-N''-(tetrahydro-furan-2-ylmethyl)-[1,3,5]triazine-2,4,6-triamine;
2,4,6-Tris-(3-fluoro-4-methoxy-phenoxy)-[1,3,5]triazine;
{2-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-ylamino]-ethyl}-carbamic acid tert-butyl ester;
N-Cycloheptyl-6-ethoxy-N'-(3-fluoro-4-methoxy-phenyl)-[1,3,5]triazine-2,4-diamine;
N-(2-Amino-ethyl)-N'-(3-chloro-4-methoxy-phenyl)-N''-cycloheptyl-[1,3,5]triazine-2,4,6-triamine;
4-(5-{4-[4-(3-Chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-ylamino]-piperidin-1-yl}-5-oxo-pentyl)-tetrahydro-thieno[3,4-d]imidazol-2-one;

5-(2-Oxo-hexahydro-thieno[3,4-d]imidazol-4-yl)-pentanoic acid {5-[4-(3-chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-ylamino]-pentyl}-amide;
5-(2-Oxo-hexadydro-thieno[3,4-d]imidazol-4-yl)-pentanoic acid N'-[4-(3-chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-yl]-hydrazide;
5-(2-Oxo-hexahydro-thieno[3,4-d]imidazol-4-yl)-pentanoic acid {2,-[4-(3-chloro-4-methoxy-phenylamino)-6-cycloheptylamino-[1,3,5]triazin-2-ylamino]-ethyl}-amide;
2-{4-[4-[(1-Ethyl-pyrrolidin-2-ylmethyl)-amino]-6-(3-fluoro-4-methoxy-phenylamino)-[1,3,5]triazin-2-yl]-piperazin-1-yl}-1-pyrrolidin-1-yl-ethanone; or
2-{4-[4-[(1-Ethyl-pyrrolidin-2-ylmethyl)-amino]-6-(3-fluoro-4-methoxy-phenylamino)-[1,3,5triazin-2-yl]-piperazin-1-yl}-1-pyrrolidin-1-yl-ethanone dihydrogen chloride salt.

83. A composition comprising the compound of Claim 82.